AMERICAN Gas Journal Merchandising

NINETY-EIGHTH YEAR

News and Features Designed to Further Cooperation Among Utilities, Dealers, and Manufacturers

NUMBER 53 • SEPTEMBER 1956

Good Dealer Relationships: They can make or break the most important leg of

THE TRIPOD TO SUCCESS

Davis M. DeBard,
vice president
Stone & Webster Service Corporation, New York, New York

THERE used to be a saying in the department store business to the effect that the ultimate fate of the entire enterprise was in the hands of the people who were the least interested and the least informed . . . the retail sales clerks.

Store owners recognized the danger many years ago. They took direct action to increase efficiency at the point of sale, to improve the quality of salesmanship over their counters, and to insure a maximum number of satisfactory transactions.

They also undertook to pre-sell potential customers—through advertising and sales promotion. They tried to establish a fine reputation for their stores, and they assured customers in advance of the quality of merchandise being offered and the certainty of complete satisfaction.

There is a lesson there for the gas industry. I'll try to state it briefly—and plainly.

First — you cannot sell gas successfully unless the appliances and equipment necessary for utilization are also sold successfully.

Second—you cannot sell gas burning appliances and equipment successfully unless the customer gets his money's worth and is assured of satisfactory service.

Third—you cannot sell gas appliances or gas successfully if your sales representatives are uninformed, lethargic, or disinterested.

Obviously then, the success of the gas utility company, of the gas appliance manufacturer, and of the dealer in gas appliances are interdependent. It's one of those love and marriage propositions—*you can't have one without the other.*

And, as is usual, the opportunity for success or profit, brings with it certain definite responsibilities, for everyone concerned, the utilities, the manufacturers, and the dealers.

Let us discuss these three categories one at a time . . . starting with the utilities.

Market Cultivation

Local utility companies in any market have a better opportunity to insure success than any manufacturer or dealer. The utility, too, has a greater profit opportunity. Therefore, the gas company should assume the greatest responsibility for effective cultivation of its market.

An idea of the nature and scope of gas company responsibilities can be obtained from some of the recommendations made by the Board of Directors of the American Gas Association to all of its members as a part of the Action Program for Gas Industry Development.

Each company was urged:

1. To assume responsibility for developing sales volume of gas appliances in its territory, either through dealer promotion or direct utility merchandising. This will necessitate a determination of the potential market of gas appliances in the area served.

2. To encourage and promote the sale in new homes of gas appliances of high quality standards.

3. To encourage and promote appliance replacement sales.

4. To assume leadership generally in promoting the sale of top quality appliances.

5. To offer dealers an appliance finance plan, if they haven't one available.

6. To re-evaluate its main-extension policies in order to serve the maximum economic number of new customers.

7. To distribute gas with sufficient uniform characteristics and pressures as to permit the proper performance and satisfactory operation of appliances through the years.

8. To inform its customers regarding the extent and character of appliance servicing which the utility is currently prepared to render.

9. Whenever necessary to assist appliance manufacturers and their local representatives in training of appliance salesmen and appliance installers.

10. To accept the association's appliance approval requirements and testing programs as the basic fundamental standard of the industry—the primary objective being to insure high degree of safety operation throughout the reasonable expected life of the approved appliance.

11. Plan promotional campaigns with cooperation of the dealer and manufacturer in assuming large shares of advertising expense and direction.

While that may sound like a fairly large order, many gas companies and the gas divisions of combination companies are already doing all of those

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things, and more, to promote the acceptance and sale of gas and gas appliances in their respective market.

Manufacturer's Responsibilities

Appliance manufacturers, too, have certain responsibilities.

When the AGA Board of Directors submitted these recommendations to its membership, the Directors of the Gas Appliance Manufacturers Association, as a part of its cooperation in the Action Program, made the following recommendations to the manufacturers:

1. Gas appliance manufacturers are urged to do their part in promoting the sale of better grade appliances.

2. In the interest of customer and public safety, each manufacturer should accelerate the sale of new appliances to replace those which are eligible for replacement.

3. Each manufacturer is urged to keep pace with competition by upgrading the performance and saleability of his products.

4. Gas appliance manufacturers should spend more on advertising and promotion to bring these activities more nearly up to a par with those of their competitors.

5. The manufacturer should fully and fairly live up to any warranty that he has made.

6. The manufacturer should have repair parts readily available through his agent.

7. Manufacturers of domestic gas appliances should furnish with their appliances, and to their distributors and dealers, safe, uniform installation instructions.

8. Manufacturers are urged to build appliances of such design and construction that proper performance and operation may be obtained over a normal appliance life with minimum adjustments and parts replacements, and with reasonable accessibility for such service.

9. Manufacturers directly or through their designated representatives, are urged to provide, whenever required, with the assistance of the local utility, adequate training of local personnel in appliance installation, adjustment and parts replacement, and further, with the assistance of the local utility, to make field checks to determine the effectiveness of the training program. In such training programs, the installation information given to appliance installers should conform to local ordinances, building, and plumbing codes.

10. Manufacturer's representative should see his dealer as often as possible, making his visits welcomed by helpful sales suggestions.

That's another large order, but again, many of our leading manufacturers have adopted those recommendations and are putting them to work. The best results are being achieved in areas where the utility company and manufacturers are working hand in hand, each shouldering his responsibilities and all hands sharing in the benefits.

What About Dealers?

Now we come to the third group with a stake in the successful selling of gas and gas appliances—the dealers.

It isn't as easy to pinpoint the dealer's responsibilities, and spell out the steps dealers should take to insure maximum sales of gas appliances, because of the many different types of retail outlets that sell gas appliances — usually along with a variety of other merchandise that frequently represents the major part of the outlet's total volume.

Because of this we have a situation in which gas appliance sales may be of little importance to some outlets — while the outlets are of tremendous importance to the gas appliance industry.

Gas utilities, which used to account for the bulk of gas appliance sales, last year sold only 8.6 per cent of the total —leaving 91.4 per cent to other outlets.

Who Sells What?

Let's break this down by appliances and see who sells what.

Nearly 65 per cent of all gas ranges are sold in three types of outlets . . . department stores, furniture stores, and appliance stores.

Appliance stores accounted for 26.4 per cent, furniture stores for 18.1 per cent and department stores for 19.7 per cent.

Appliance stores also led in clothes dryer sales with 46 per cent. Furniture stores ran a distant second with 11.6 per cent and department stores accounted for 8.7 per cent.

The picture in central heating equipment is entirely different. Plumbing and heating dealers sold 81 per cent of all boilers, 84 per cent of furnaces and 80 per cent of conversion burners. These same plumbing and heating dealers also sold 54 per cent of all water heaters. Incidentally, 20 per cent of the water heaters sold last year were sold by department stores, chain stores, and mail order houses.

Apparently the best outlet for direct heating equipment is a hardware store. Such stores topped the list with 23.5 per cent of direct heating sales last year. LP-Gas dealers were second, accounting for 16.7 per cent of direct heating sales, while plumbing and heating dealers were in third place with 14.3 per cent.

In other words, more than 90 per cent of our production of appliances used in the utilization of gas is being sold by a varied assortment of organizations and people—none of them in the gas industry.

Our fate, you might say, is in the hands of total strangers.

We cannot expect hardware merchants, department stores, plumbers, and mail order houses to unite in any retailer counterpart of the Action Program for Gas Industry Development.

That doesn't mean we have a hopeless case on our hands. It does mean that there is a big job to be done by manufacturers and utility companies.

More Selling Needed!

First, to establish among potential customers a ready acceptance of gas as a fuel, and of gas appliances as vital aids to better living.

Second, to prove to dealers that there are profits to be made in selling gas appliances.

Third, to demonstrate to the dealer how he can set about making the sales that will produce those profits.

Dealers Have Problems, Too!

In this connection I'd like to quote from an article by Mort Farr, one of the outstanding appliance dealers in the United States:

"Sales volume is not built by just adding salesmen or stepping up advertising or talking it up in your organization. It is a complex management job involving planning, organizing, and controlling. A successful appliance dealer will have to learn more about a lot of subjects involved in his business.

"It will be helpful if dealers will analyze their business — and overcome their weakness. First, ask yourself if you were a customer why would you want to do business with your store? If you were an employee, how would you like to work for you? Take a thorough inventory of your business.

"Do you like weakness? Do you know the sources of help for your business problems or for advice on current operations? Do you keep up to date through trade papers, conventions. dealer meetings, visits with other progressive dealers, and study?

"Is your store well located for appliance business? Is the building adequate? Is your store attractive so as to give the appearance of being a reliable, well patronized store? Do you have attractive window displays?

"Do you have too many lines? Do you have the best franchises that you can secure? Could you get more stock turns and larger volume with fewer lines? Do you have an advance sales plan? Do you prepare a budget? Do you know your break even point?

"How much manpower do you need? Are you satisfied with all your present manpower? Do you have your own service department? Is your service department making customers for you? Are you keeping your old customers while making new ones?

"Does your bookkeeping and records keeping function so that you can

get figures quickly when you need them? Are you satisfied with your methods and source of installment financing? Have you analyzed the effectiveness of your advertising?"

Those are questions that every dealer ought to ask himself. What's more they are good questions for utilities and manufacturers to ask of dealers who now sell gas appliances, or who might be considered as potential outlets.

Of course, you've got to do more than ask questions if your diverse group of dealers is to be made into an effective selling force. You have to build a hard-hitting, comprehensive dealer program.

Where To Get "Help"

In this connection, I want to commend to the attention of every utility man and every manufacturer the "Pattern for Profit" plan developed by the Dealer Sales Committee of the American Gas Association.

This is the most complete dealer relations package that has ever been offered to this industry—and perhaps any industry. It covers every phase of gas industry and dealer relations, provides detailed, step by step suggestions that will make it possible for any utility to start from scratch to establish and carry on an effective dealer program. It also will help any company with an existing program to check on its effectiveness, to gain some new ideas, and to stimulate dealer interest and sales.

Also very worth while are the Gas Appliance Manufacturers Association college courses in gas appliance salesmanship.

The GAMA courses, which were started on a test basis in Brooklyn, have now been conducted or repeated in 35 cities and have resulted in the training of more than a thousand gas appliance salesmen representing both utility companies and appliance dealers. A complete course outline and instructor's manual has been made available so that the course can be put on wherever there is a gas company sufficiently interested in upgrading the quality of gas appliance salesmanship at the retail level.

You may wonder what happened to the tripod mentioned in the title of this talk. Actually it's just a symbol of the three elements needed to sustain this industry at a proper level—the utilities, the manufacturers, and the dealers.

If all three legs are strong and firm, we'll be able to survey the industry scene with satisfaction. If any leg weakens or sags, I'm afraid we'll have to take a dim view of the future.

As Frank Smith, president of the Houston Gas Company and former president of AGA, has said:

"Every segment of our industry must do its part if our united efforts are to get maximum results in the competitive markets of today and tomorrow. Successful achievement at the point of sale is the final test of all our sales planning, organization, and promotion."

Acknowledgment

This article was prepared from a talk given by Mr. DeBard before the Canadian Gas Association meeting, Murray Bay, June 26-29, 1956.

Father and son give a quick check to the Ruudiator gas boiler that maintains water temperature at 80F in a 16 by 32-ft swimming pool in Caledonia, near Rochester, New York. Gordon Bierbrauer constructed the pool to aid his son, Bradley, overcome polio. The boiler, used to provide therapeutic heat for the water, is a model 800 high-input gas unit, produced by Ruud Manufacturing Company, Kalamazoo, Michigan.

Swimming Pool Warmed By Gas Hot Water Heater

A Ruudiator gas fired boiler has been installed to heat water in a family swimming pool to hasten the recovery of a young polio patient.

Mr. and Mrs. Gordon M. Bierbrauer of Caledonia, New York, installed the heater in their 16 by 32-ft pool to raise water temperature nearly 20 deg. for therapeutic treatment for their son who was stricken with polio in 1953.

Bierbrauer, district manager of the Suburban Propane Gas Corporation at Churchville, New York, installed the gas boiler, produced by Ruud Manufacturing Company, close to the pool's filter in a 4 by 8 concrete block pit located 8 ft from the water.

Water is completely filtered once every 24 hours and then circulated by pump through the Ruud unit. It is vented outside the pit with a draft diverted attached. The Model 800, a high-input boiler with copper and bronze waterways, maintains an 80 deg water temperature for 17,000 gal of water.

Slightly more than 900 therms of gas are needed to maintain the pool's proper temperature during a five month period from May 1 to October 1. Natural gas is provided by the Rochester Gas and Electric Company which serves that area.

Using the U. S. Weather Bureau's average temperature figures for a five month season, Bierbrauer says the cost of gas to heat the pool water, at 15 cents per therm, is $138.

Merchandising Round-Up

From all over the nation came the best, the most successful promotions ever staged by gas utilities and their dealers. They added new customers, upgraded ranges of old customers, spread the good news of modern "range with a brain" features, and brightened up human relations. Here THE AMERICAN GAS JOURNAL presents . . .

The Biggest Sales on the Range

Ernestine Adams

"THERE ain't much business did no more that ain't gone out after."

That is the slogan of a big company. One of the executives got it from a negro contractor who was low bidder on a job the company had.

You can look far and wide — into the classics and into the comics — and you can't come back with much better advice.

There is no argument about going after business. The decisions to be made are *how* the business is "gone out after."

Our concern is with gas range-selling methods. It has finally been conceded that if customers don't buy new gas ranges, they're likely to buy new electric ranges. No housewife in the U. S. A.—or professional cook, either—is going to be happy long without a modern range.

This is a story of how to sell the housewife. These are methods that went out after her, brought her in, and sold her the marvels of modern gas cooking.

And made her happy.

That underline is important. The promotions described here were all aimed at that main objective although it wasn't stated. Make the housewife more satisfied with a new gas range or by changing to a gas range.

Some people call it "raising the standard of living." We call it "pursuit of happiness."

When planning a campaign it might be helpful to keep in mind that your customer is already sold on upgrading. Your job is to concentrate her attention on upgrading a specific item — her gas range.

The Best Promotions

Utilities serving gas were asked about their best promotions for gas range sales; how they were planned and managed and what the result was.

We got a round-up of tested campaigns that everyone who plans a promotion needs to see. We asked for the best one and answers took in all kinds of campaigns.

The "Old Stove Round-Up," generally in the Fall, is still the most popular promotion. The round-up on the range has been adapted to "Round-Up of the Ranges." The time is generally in September, October, and November. Many have changed "Old Stove" to "Old Range" but the idea is the same — to upgrade the range in every kitchen. Lone Star Gas, which has a highly successful Round-Up, will have a "Range Change Sale Time" this Fall.

The Spring Gas Campaign is moving in fast and is more successful in some areas, perhaps because of the time. A list of promotions includes:

Old Stove Round-Up
Old Range Round-Up
Spring Carnival of Values
Matchless Gas Range Campaign
Exchange Your Range
Pied Piper Old Range Round-Up
Where in the World Do You Want to Go?
Partners in Progress
Trade 'N Save
Pebble Beach (a vacation spot).

Two companies do not include special campaigns in their programs. Philip M. Alden reports that Philadelphia Electric Company last Fall carried out a "Prospect Program." The company assists the dealer by inviting a small group of prospects to a demonstration of appliances in his store. Usually between 25 and 50 respond.

The year-round program is also followed by Peoples Gas Light and Coke Company, Chicago, Illinois, Roy B. Munroe writes. During August and September the "trade-in your old stove" theme is used in advertising, but the standard trade-in

"The most productive gas range promotion," reports Washington Gas Light Company, whose floor display is shown above. In spite of the growth of other promotions, "Old Stove Round-Up" is still at the top.

allowance is the same all year. No premiums are accepted from gas range manufacturers or offered salesmen.

MidSouth Gas Company follows the demonstration plan on a year-round basis. This takes two forms, according to R. P. Hill. One is a "Quicky" demonstration, which this year will be on controlled top burner cooking. The other is an installation of a gas range on a trial basis. This has proved successful where sales people use discretion in placing the range.

"Where in the World Do You Want to Go?" a promotion that has been effectively used by several gas companies, has the big-prize appeal. First prize is a pair of tickets to anywhere in the world to one customer and another pair to the dealer — $2500 cash to each if cash is preferred. Oklahoma Natural Gas Company used the "Where in the World" promotion for the largest dealer-gas company cooperative sales campaign it ever sponsored, according to M. H. North.

Cooperative promotions with one manufacturer have shown excellent results in some cases. This may be with one dealer, like the six weeks campaign in Altoona, Pennsylvania, in which Tappan, Peoples Natural Gas, and Wolfe Furniture Company cooperated. Or it may be a manufacturer, a gas company, and as many dealers as want in, such as the Roper, Gas Service Company, and Kansas City dealers promotion.

Manufacturers cooperate in nearly all the campaigns. Laclede Gas Company and dealers in its territory had 13 range manufacturers helping in a Spring campaign.

Not every gas utility can have a "Centennial Gas Range Sale," as Atlanta Gas Light Company did this year. But every company has birthdays and when they hit silver, golden, and diamond anniversaries, they should be celebrated, not only to sell appliances but to remind your customers how long you've been taking care of them.

When?

Periods for successful sales promotions covered here are all the way from two days to three months.

The "Old Stove Round-Up" and other Fall campaigns that follow the "Round-Up" pattern usually run sometime during the three months, September, October, and November. Some run all three months. Piedmont Natural Gas Company, Charlotte, North Carolina, begins September 1 and continues to December 20. The Spring Matchless Gas Range Campaign usually covers most of April and May.

P. R. Shea of Southern California Gas Company said his company worked with one dealer three days as part of its "Where in the World" campaign and the concentrated effort sold 17 ranges in three days. Over the two-month campaign the same store sold 37 ranges.

In cooperation with Ohio Fuel, Home Gas & Appliances in Mansfield, Ohio, held a 58-hour Sell-A-Thon. This Sales Blitz included all items and 50 major appliances were sold. The store did not close. Special discounts were given to people purchasing an appliance between midnight and 7 a.m.

Climate should definitely be considered in the year's plans for all promotions.

In the campaigns that have not fulfilled expectations the principal reason given is that two campaigns were going on at the same time. Opinion is that New Jersey Natural Gas Company's and Lynn Gas & Electric's range promotions would have done better if other campaigns had not been on at the same time.

More than one promotion adds to the pressure and divides the interest. A yearly program should be worked out that provides for well spaced sales campaigns.

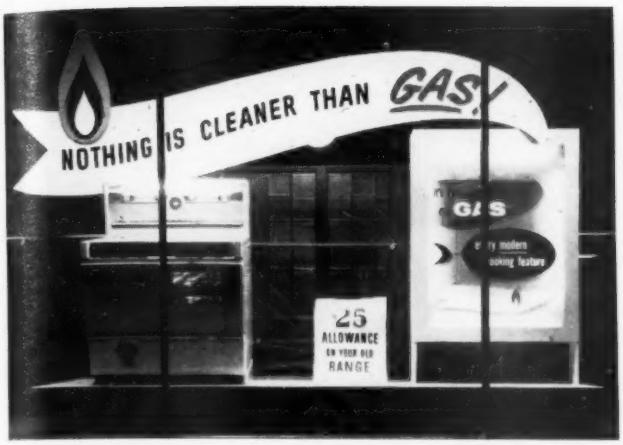
Alabama Gas Corporation issued a folder the first of the year giving dealers a pep talk and the "Promotion & Advertising Plans for 1956." Its schedule followed this pattern:

1. **January 20 — March 8 — Operation Home Improvement (laundry equipment)**
2. **March 16 — April 19 — Spring Gas Range Sale**
3. **May 4 — June 28 — Servel Gas Refrigerator**
4. **July 4 — September 27 — Old Stove Round-Up**
5. **October 26 — December 20 — Make It a White Christmas (all gas appliances)**

Any decision on the length of time to be devoted to the

Exchange YOUR RANGE SALE
...AUTOMATIC TOP BURNER COOKING
AT NO EXTRA COST!
ON THIS VALUE-PACKED
ROPER
Gas
RANGE
MOD. 32A64
*Tem-Trol
THE FABULOUS NEW HEAT-CONTROLLED TOP BURNER . . .
Regulates top burner heat by degrees like a modern oven . . . ends pot-watching because the temperature stays just right.
Here's automatic top burner cooking at the lowest price yet! You'll find a host of other deluxe features to enjoy too . . . exchange your range for this bargain now!
REGULARLY $236.00
EXCHANGE PRICE
$179.50
AND YOUR OLD STOVE
FREE NORMAL INSTALLATION
JUST $10 DOWN
THE GAS SERVICE CO.
Natural Gas for home and industry

Above is an ad from the successful Gas Service Company-Roper cooperative "Exchange Your Range Sale." Automatic cooking and special price were plugged throughout the sale by a large newspaper campaign.



Attractive window displays like this one of Hartford Gas Company are good attention compellers. Hartford Gas sent dealers window cards and banners for its sale.

One of the dealers Southern California Gas Company worked with was Barney Shane who did a good job of advertising prizes to be given on his truck.

campaign needs careful study. Too short a period doesn't allow time for full effect of advertising and personal effort. A sale held too long heightens the danger that salesmen and the public both may lose interest.

Advertising

After you've decided what and when your campaign is going to be, you first line it up on paper for your dealers and/or for your company stores. The purpose of this prospectus is to enlist dealer cooperation and create interest. It explains exactly how the whole promotion will be carried out.

Most companies put all the details into a mimeographed brochure. This gives the procedure for advertising to customers; a breakdown on all bonuses; premiums, prizes, contests; the gas ranges included in the promotion, etc.

An excellent example of this is Laclede Gas Company's brochure "Make Sure It's Automatic" Gas Range Campaign. This received a first prize in the 1955 Public Utilities Advertising Contest. John J. McKearin believes also that a series of mailings to dealers and their salesmen throughout the campaign made Laclede's promotion successful.

Lone Star Gas Company provides dealer promotion kits to put over specific and workable ideas. Jim Carll says among other materials these kits contain a special open house promotion consisting of (1) an open house invitation, (2) free gift drawing registration card, and (3) gift certificates (to be used as down payments on new gas range,) for registrants who do not win in drawing.

The next thing is to tell the good news to those important people — your customers.

Just about every company uses newspapers to tell customers about wonderful new features on ranges, trade-ins, easy payments, cooking demonstrations, and special premiums during the sale. The amount and extent of newspaper space is determined, naturally, by number of customers, size of area, number of newspapers in area, and length of sale period.

There is no set rule to go by. That's what advertising managers are for — to use their knowledge and experience to set up a campaign that is efficient and economical. The advertising budget for a sales campaign is generally based on so much per each range in the quota. One company gives up to $8 a stove on dealer cooperation advertising.

In its Spring Matchless Gas Range campaign Pittsburgh Group Companies carried 300 column inches in Pittsburgh papers; 32,250 inches in 28 dailies and 55 weeklies, and 10,013 inches were inserted by 832 dealers.

Window displays, radio and television, streetcar and bus cards, billboards, folders inserted with bills, direct mail — these are all part of the effort to communicate the good news to customers. The picture above illustrates another way.

Ohio Fuel carried 44 one-minute commercials on each of 11 radio stations and 110 one-minute television spots. For the Pittsburgh Group two TV channels carried two half-hour programs each week that featured the 10 ranges of the cooperating manufacturers.

Advertising is a shared expense. For Hartford Gas Company's Spring Carnival 58 newspaper ads were paid, 60 per cent by dealers and 40 per cent by the gas company. All advertising (newspaper, radio, TV, etc.) was subject to approval prior to release.

A newspaper advertising schedule for Hartford Gas was sent to all dealers so they could make cooperative advertising more effective by tie-ins, Mrs. Elsie F. Geary reports. This included 3 full pages and 28 small ads that ran between April 4 and June 13.

For the Old Stove Round-Up in Washington, D. C., Washington Gas Light Company and dealers did almost the same amount of newspaper advertising. The gas company mailed 380,000 bill inserts and dealers mailed 10,000 "Trade 'N Save" folders separately.

The majority of utilities cooperate 25 per cent on dealer advertising; most range manufacturers go 50 per cent on ads concerning their own products, leaving the dealer a 25 per cent charge.

The utility company sponsoring the campaign may supply promotional material to dealers for window and store displays. Usually a flat rate is charged.

John C. Huston, Bridgeport Gas Company, said his company paid 50 per cent on American Gas Association materials for the Old Stove Round-Up.

The "Pied Piper" display was sold to dealers for $10. This included a complete window display kit and six dolls. To assure proper use of the material, Wisconsin Public Service's display department set them up.

Personal Contact

In every campaign this personal contact of gas company salesmen, dealers, dealer salesmen, and customers seems to hold the key to effective selling.

You must have interest, cooperation, and enthusiasm from the first three to corral the customer and put her on that "pursuit of happiness" track.

How do you create interest, cooperation, and enthusiasm?

Well, you can't do it by yourself. It takes a lot of people together to get stirred up enough to infect the indifferent, whom we have always with us.

One successful "kick-off" is a meeting of all the dealers — and if you have room — dealer salesmen, too.

Gas Range Campaigns all over the nation and he

Company and Address	Promotion Theme Date	Newspaper Space	Other Advertising	Personal Contact
1. Alabama Gas Corp. Birmingham, Alabama	Old Stove Round-Up July 20-Sept. 27	400″ in each of 26 towns or 10,400″.	100,000 direct mail pieces to customers	Retail territory salesman worked from door-to-door
2. Atlanta Gas Light Co. Atlanta, Georgia	Centennial Range sale Apr. 9-May 26	558″	Radio, TV, displays	Territory salesmen door-to-door canvassing
3. Bridgeport Gas Co. Bridgeport, Conn.	Old Stove Round-Up	25% coop with dealer	Radio spots, 15 billboards, 50,000 bill enclosures, 50% coop AGA materials	Floor traffic
4. Central Electric and Gas Co. Lincoln, Nebraska	Old Stove Round-Up Fall, 1955	6247″ in 49 papers	35 TV spots and 125 radio spots. Displays	Door-to-door canvassing, Using-The-User.
5. Central Hudson G and E Poughkeepsie, N. Y.	Thanksgiving and Xmas sales Sept-Oct-Nov	2½ pages	Radio	Floor traffic and utility employee leads
6. Consumers Power Co. Jackson, Miss.	Automatic Top Burner April 2-May 19	45″ ad each week in 12 dailies, 20″ ad each week in 53 weeklies	Window banners supplied dealers	Dealer contact by 12 Division representatives
7. Equitable Gas Co. Pittsburgh, Pa.	Spring Matchless Gas Range-1956	5170″ by co. and dealers	Radio, TV, billboard, direct mail, billing inserts	Home contact by salesmen and home service girls
8. Gas Service Co. Kansas City, Mo.	Exchange Your Range May 1-June 2	All local daily and weekly papers	none	Territory salesman and floor sales people
9. Hartford Gas Co. Hartford, Conn.	Spring Carnival Apr. 13-June 15	58 ads (gas co. 40%)	Bill inserts to 67,000 customers; TV, radio, etc.	Territory salesmen and prospect slips from employees
10. Laclede Gas Co. St. Louis, Mo.	"Gas Top Burner That Thinks"; Spring 1956	12,000 lines $7,800 coop ad	Window display emphasized	Floor traffic, dealer contact
11. Lone Star Gas Co. Dallas, Texas	Old Stove Round-Up Fall 1955	weekly in 250 papers Oct. and Nov.	Radio spots — 70 stations TV spots — 6 key stations	All employees, plus floor traffic
12. Lynn Gas and Electric Lynn, Mass.	Old Range Round-Up Fall, 1954	1000″	none	Residential salesmen and floor personnel
13. Milwaukee Gas Light Co. Milwaukee, Wisc.	Spring Range Campaign	46,000 lines	55 radio spots and 10 TV spots wk., billboards.	Floor traffic, demonstrations, contest blanks. Dealer kick-off dinner.
14. Minneapolis Gas Co. Minneapolis, Minn.	Spring Gas Range Sale, Apr. 16-May 26	20,000 lines (coop)	Floor and window displays	Floor traffic and "Use-the-User."
15. Mystic Valley Gas Co. Malden, Mass.	Matchless Gas Range Sept 4-Nov 24	4000 lines	Billboards, car cards, bill stuffers	Dealers and retail domestic salesmen in closed territories
16. Nashville Gas Co. Nashville, Tenn.	Old Stove Round-Up Oct. 1-Nov. 30		Window displays	
17. New Jersey Natl. Gas Co. Asbury Park, N. J.	Partners in Progress May and June	2 pages total	Daily spot radio, direct mail to customers	Followed employee leads; Canvassed by district and Floor traffic
18. Northern Indiana Pub. Serv. Hammond, Ind.	"Dress-Up" Gas Range Nov 2.-Dec. 12, 1953	2000″ in 40 papers	Floor and window displays, bus cards, billboards, radio	Territory salesmen and floor traffic.
19. North Shore Gas Co. Waukegan, Ill.	Old Stove Round-Up	25% dealer coop	Window displays	Floor traffic.
20. Ohio Fuel Gas Co. Columbus, Ohio	Spring Matchless Gas Range Apr.-May	27,165″ (utilities) 18,929″ (dealers)	Radio spots, TV, dealer aids	Kick-off dinner and show, demonstrations in stores
21. Oklahoma Natl. Gas Co. Tulsa, Okla.	"Where in the World" Oct.-Nov. 12	5 ads in each town coop ⅓ with dealer ads	Billboards, bus cards, coop ⅓ in TV and radio	Personal calls after sale and to prospect closeby.
22. People's Gas Light and Coke Chicago, Ill.	Year-Round sales effort	All Chicago papers	Direct mail to 75,000 aged range list: bill stuffers	Territory salesmen
23. Philadelphia Electric Co. Philadelphia, Pa.	"Prospect Program" 2 mos. Spring & Fall	none	Invitations to 300 or more prospects	Average 25 to 50 attend demonstrations by H. E.'s.
24. Philadelphia Gas Works Philadelphia, Pa.	Matchless Gas Range	3 pages color; 15 ads, 600 lines Dealer coop ads	TV, car cards, bill stuffers, truck posters, motion displays, etc.	Territory and floor salesmen, dealer contact staff.
25. Pittsburgh, Group Cos. Pittsburgh, Pa.	Spring Matchless Gas Range Apr. 9-June 16	32,250″ by utility 10,013″ by dealers	TV, radio, billboard	Kick-off dinner with musical show for dealers.
26. Southern Calif. Gas Co. Los Angeles, Calif. (one dealer only)	"Where in the World" Gas Range Campaign April-May	4½ pages (Shane store only)	Invited 5000 to visit Shanes to register	Floor traffic only
27. Southern Counties Gas Co. Los Angeles, Calif.	"Pebble Beach" Gas Range Sale	300″	Displays in store chain which cooperated	Floor traffic only.
28. Springfield Gas Light Co. Springfield, Mass.	Matchless Gas Range May	25% dealer coop		Floor traffic.
29. Washington Gas Light Co. Washington, D. C.	Old Stove Round-Up Oct. 3-Nov. 13	33,000 lines (gas co.) 35000 lines (dealers)	380,000 bill inserts; Dealers mailed 10,000	Prospects followed up by co. and dealer salesmen.
30. Washington Natl. Gas Co. Seattle, Wash.	Old Range Round-Up Sept. 12-Oct. 3, 1949	2000″	Radio, billboard, direct mail, street car and truck	Personal follow up to dealer invitations.
31. Western Kentucky Gas Co. Owensboro, Ky.	Old Stove Round-Up Sept.-Oct.-Nov.	4000″ (19 pages)	Billboards, car cards, radio	Sales staff contacted prospects.
32. Wisconsin Public Service Green Bay, Wis.	Pied Piper Old Range Round-Up	6 pages with dealer's names	none	Four regular field salesmen.
33. Zenith Gas System Alva, Okla.	Old Stove Round-Up			Dealers given plans at Kickoff dinner.

how they worked and why they worked

Contests, Prizes, Premiums	Quota (Ranges)	Sales (Ranges)	Special Gimmick	Analysis of Result
1. Round-Up trophy to plant manager; Merchandising prizes	1336 (1954)	1102 (1955)	Combination of appealing to public, salesmen and managers.	Quota is to go over sales of year before. Local conditions better in 1954.
2. Merchandise given on point system to salesmen	305 (1955)	491 (1956)	"For 1c More" slogan. 1c bought deluxe features.	Success due to extra sales effort; to $10 $15 down-payments.
3. $20 allowance; half rebated to dealers.	none	500	Four Mystery Shoppers gave $5 and Blue Flame to good salesmen	Gave $20 allowance on old range rebated half to dealers. Sales 40% higher, gas co; 75%, dealers.
4. Premiums for best models	Individual Quotas	Total made	Extensive use of AGA Round-Up displays	This campaign always effective. Remains practically same.
5. Turkey premium with each sale	80	105	Turkey with each range sold	Same promotion exceeded quota 7 yr. Turkey during holidays hard to beat.
6. $4 for automatic range sale. $2 for non-automatic range sale. Dealer allowance $6 to $4.	2,200	2,740	none	Company sales, 21% automatic; dealers sales 5% automatic. Shows need of dealer training on upgrading.
7. Dealer salesman contest: $10 daily; weekly DeSoto car, etc.	none	3,664	Use of "self-liquidating" traffic builder —Lilly Dache nylons	Over 40% ranges sold were "matchless." Improvement in upgrading.
8. 51 salesmen got fishing trips. Also $5 per range	812	922	none	Roper range, regularly $236 sold for $199.50 plus trade-in allowance.
9. Salesmen team contest, bonuses, "Lucky Salesman" $25 each week	500	600	Campaign had many phases-all helped	Promotion carefully planned and roused overall enthusiasm.
10. "Trip of Your Choice" for dealer and utility salesman	none	1300	Vacation prizes, using bonuses earned in campaign	Bonuses and coop adv. help of mfr. All ranges sold were automatic.
11. Inter-district contest.	Varied in each district	18,000 estimate	Took advantage of Texas State Fair to exhibit.	Inspired selling, good advertising and publicity, superior ranges, superior fuel.
12. Cash prizes to residential salesmen	176	142	Substantial trade-in allowance	Quota perhaps too high. House heating promotion at same time.
13. Dealer and salesmen cash prize. Set It and Forget It contest. 10 ranges to public	none	314 (co. only)	Contest blank pickup at dealers— 25 words on "Why I Like, etc."	Up grading ranges and more live ranges on dealers' floors. Acceptance of TC burner.
14. 50 awards to dealer and utility salesmen to baseball game	1800	1832	Church and club cooking schools; planned sales training	Planning months in advance; close cooperation; Quotas for each dealer.
15. Bonuses for salesmen and high trade-in allowances	1235	1351	All advertising identified by "Miss Modern Matchless"	Success due to cooperative objectives of neighboring gas companies.
16. Dealer salesmen got $5 per range sold. Bonuses of co. stock.		Up 33%	Held big rodeo with profits going to charity	In spite of TVA 12 dealers put in Round-Up Windows.
17. Gave canister set with auto. range; smaller set with non-auto.	none	105	Wives of salesmen "Partners in Progress;" won points	Exper'3d better results but upgrading good. Water heater promotion at same time.
18. Each outside salesman could earn complete wardrobe plus cash	none	561	Each salesman represented by card-board figure dressed as sales made	Careful planning; salesmen dinner meetings inspired enthusiasm.
19. Prizes $50, $20, $10 window display. Aluminum set with each sale. Range for Lucky User.	200	197	Window display contest helped	Considered very successful although did not get full dealer cooperation because lacked dealer-contact.
20. Weekly prizes to dealer salesmen. Contest among dealers reps.	none	2138	Lilly Dache hose to customers who witnessed demonstrations	Sales per dealer disappointing. Gave good picture of dealer support.
21. Cash bonus $1.50 to $7.50 per range.	2500	2826	$2500 in trip or cash for customer and for dealer	Planning and direction probable key. Promotion was in constant push.
22. none	none	none		One of over 500 gas appliance dealers- All help to keep customers using gas.
23. Small gift such as magnetic pot holder. Prizes of food, etc.	none	6.3 Avg. sales/party	Demonstration party given for small group	Program has resulted in definite sales from follow-up plus dealer good will.
24. Cash sales bonuses to co. and dealer salesmen	1600	1823	Cooking demonstrations; store-wide promotions	Heat control top burner promotion pushed matchless sales. These made up over 25% sales.
25. Weekly prizes for dealer and salesmen and dealer reps.	none	1802	Dealers sold 10,000 pr. Lilly Dache hose.	High incentives to dealer salesmen. Prizes—DeSoto car, $200 bond, etc.
26. Prizes given in larger promotion in which Shane participated	Shane's 9 (3 a day)	17 in 3 days 37 total	Personal invitation for cookies and coffee; "live" demonstration	Details from one store which took part in utility promotion. Very effective.
27. Five top salesmen and wives given wk-end in Pebble Beach	509	742	Kick-off dinner and follow-up letters throughout campaign	Success due to incentives and continued follow-up.
28. Retail salesman got 5 cents 1st range, double for each up to 12th which was $102 bonus.	90	126	Unusual bonus	Interest in bonus offered. Sales continued above 1955.
29. Weekly prizes $50; campaign prizes $150 and $75	2400	2880	Dealer breakfast once a week. Silver Dollar shopper	Constant effort, excellent cooperation from every one concerned.
30. Point system with cash prizes to salesmen	296	1006	Premium of $20 hat from local store each sale	Every night for week before dealers given refresher in selling.
31. Cash bonus for sales 1-5 $2 ea.— 16 or over $5 each	264	300	Turkey to each employee selling 6 ranges in Sept. and Oct.	Complete cooperation of employees put over promotion.
32. Pied Piper doll with each sale	none	90	21 dealers had same colorful display with dolls	Displays striking; Pied Piper dolls drew attention.
33. Dealer salesmen $5 per range sold			10 yr gas range service warranties issued dealers for each range sold	

Pittsburgh Group Companies launched a king-size promotion with a dinner and show called "Moneymen and Models" for 409 dealers. Ten manufacturers participated and 1802 ranges were sold in two months. The skits shown above featured heat-controlled top burners, oven meat thermometers, mini-pilot lights, etc. Personal contact, such as these kick-off dinners, generates enthusiasm for a successful promotion.

Pittsburgh Group Companies, which do not sell appliances, entertained 409 dealers and their wives for the Spring Matchless Gas Range Sale at a dinner and musical show, "Moneymen and Models." The skits, with beautiful models, featured thermostatically controlled top burners, oven meat thermometers, and mini-pilot lights.

In Alva, Oklahoma, Zenith Gas System held a dinner for dealers before its Old Stove Round-Up and explained the plan of the campaign.

Washington Natural Gas Company invited dealers by mail, then followed up in person. Every night for a week before the sale, dealers were brought in for dinner, a refresher in selling, and presentation of the program. Company salesmen attended a breakfast before the campaign began when they were given balloons, pop guns, and lollypops for children in the salesroom or during home calls.

J. G. Berwanger stated that Ohio Fuel Gas Company also had the kick-off dinner for dealers with a musical show for its Spring campaign. Lyrics of the show are written around the matchless gas theme. Ohio Fuel representatives personally gave the brochures covering the campaign to dealers and salesmen in individual stores.

After the kick-off many companies find it profitable to keep close contact with dealers through dealer representatives. Bridgeport Gas people felt that the 1955 Old Stove Round-Up was more successful than usual because they had a dealer representative for the first time.

Jerome P. Happ stated that North Shore Gas Company did not get full cooperation from all dealers in its area because of lack of dealer contact manpower. The situation is corrected and the company hopes to have 100 per cent dealer participation this year.

Some gas companies have retail territory salesmen, who work from door-to-door. Alabama Gas has 37 such salesmen and they push extra hard during any campaign.

The basic personal contact is in the gas company showrooms or in stores of the company or dealers, where salesmen meet the potential customer. Various attractions are used to get people within reach of floor salesmen.

A successful idea for one store is described by Joseph Staller in connection with Southern California Gas Company's "Where in the World" campaign. This dealer, Barney Shane Appliances, mailed 5000 invitations for a three-day special campaign. Mr. Shane personally greeted all visitors, provided coffee and cookies, and "live" demonstrations were conducted and door prizes were given. This developed a substantial amount of traffic.

Cooking schools draw large audiences and give excellent opportunity for demonstrating range features. Lone Star home economists hold demonstrations in various cities, both for company stores and dealers.

Employee prospect slips give salesmen leads for special calls. Then new purchasers can often supply potential customers. Washington Natural Gas gave each purchaser a set of glasses for prospect names. A. M. Schultz of Minneapolis Gas Company calls this the "Use-the-User" contact method.

Bringing customers to a range or appliance display also has many angles. Nashville Gas Company's Round-Up promotion included a tent exhibit with 22 booths rented by gas appliance dealers. The only entrance to the rodeo tent was through the exhibition tent. It was opened several hours before the rodeo and incentives were offered to get the crowd out early.

Lone Star Gas Company's exhibit at the Texas State Fair during its Round-Up drew some 250,000 people and was an impressive factor in range sales.

Quotas and Sales

Quotas for a sales campaign give a definite goal to try for and set a level for all the planning.

There is another reason for setting quotas. One company said setting individual quotas for each dealer helped make a successful campaign. Your advertising and promotion, the amount of manhours involved, the type of contest, prizes, and premiums — these and other plans can be made with your best judgment only when you know how many sales you expect to make.

To arrive at the figure, most planners first rely on past experience. Not what were the last quotas but what were the sales in the last campaign of this same type. Springfield Gas Light made its quota 50 per cent higher than the year before. Actual sales were 40 per cent higher than the quota.

If this is a new venture for your company, make a stab at setting a goal. The table will give you something to go by when you find a company similar in size and territory.

Any salesman prefers "Let's get over that 250 quota" to "See how many you can sell." Everyone wants a standard o

measurement to see how well he does. It's a good plan to provide one.

You will notice that most of the quotas of the campaigns listed went over the top.

Lynn Gas and Electric Company, did not quite meet its quota in the Old Range Round-Up but J. R. Erikson thought the quota may have been set too high. Also, salesmen were engaged in a house heating promotion at the same time.

Contests, Prizes, Premiums

For Dealers and Salesmen

Incentives are directed at dealers, utility and dealer salesmen, and customers. Sometimes a well developed campaign will have all three — contests, prizes, and premiums — for all classes.

One popular premium is a cash bonus with each sale. Although this practice has widespread use, the amount and procedure vary.

Western Kentucky Gas Company's R. D. Williams gave this set-up for bonuses in a Round-Up promotion:

1 to 5 ranges inclusive — $2 per range
6 to 10 ranges inclusive — $3 per range
11 to 15 ranges inclusive — $4 per range
16 & over ranges — $5 per range
$1 additional was paid for all CP ranges.

Bonuses for salesmen in Oklahoma Natural Gas Company's "Where in the World" sale ranged from $1.50 to $7.50, depending on the manufacturer's suggested retail price.

$150 to $199.99 ranges carried $1.50 cash bonus
$200 to $299.99 ranges carried $4.00 cash bonus
$300 or more ranges carried $7.50 cash bonus

Several utility companies offer $5 for each sale of a range, regardless of how many are sold or what the price of the range is.

In addition to cash bonuses, there are many ingenious contests to hold and increase interest in the sale as it progresses.

Nashville Gas Company's Dan Ewing likes the idea of giving shares of Tennessee Natural Gas Company stock for salesmen prizes in addition to bonuses. First prize was 12 shares in a Round-Up campaign, second prize, 8 shares, and third, 5 shares. For each range sold the dealer salesmen got one chance at the prizes. However, in this TVA area, if the store had a Round-Up show window, the salesmen got two chances. The gas company feels that company stock will produce a lasting interest and tend to improve dealer relations.

Gas Service Company gave a 3-day all-expense paid fishing trip to all salesmen who went over their quota, according to F. M. Rosenkrans. Winners totaled 51 salesmen. The four women who busted quotas received 8-day clocks. One man, C. Roehl, Topeka, Kansas, sold 27 ranges during the sale.

Another contest idea is the Silver Dollar Shopper, Mystery Shopper, or Phantom Shopper. Bridgeport Gas Company had four Mystery Shoppers for its Old Stove Round-Up. These presented dealer salesmen who made good gas range presentations five silver dollars and a Blue Flame insignia.

If you think this idea doesn't make an impression, you don't know people. In one small town where we once lived, a saleswoman got a Mystery Shopper's award and on our next visit we heard about it from several sources. Recognition of special effort is as important as the bonuses.

J. H. Chenery tells of an "Old Stove Round-Up" Trophy that Alabama Gas Corporation gives annually to the plant manager who has the highest average sales per salesman. It must be won three years to remain in permanent possession.

Large weekly prizes for dealer salesmen have proved successful in large territories. Every sale made gave the salesman a card to be used in a weekly drawing. Prizes included a DeSoto car, a $200 savings bond, a $100 bond, and 50 prizes of $10 each.

Prizes were also given to its dealer representatives by the Pittsburgh Group. The five with highest records for persuading dealers to participate were sent on a 5-day trip to St. Louis for a tour of a gas range factory and a sight-seeing trip.

Theme and premiums for Wisconsin Public Service Corporation were Pied Piper dolls. The give-away dolls made attractive, colorful displays. These were set up by gas company's display department, which built dealer good will.

Fifty awards to dealer and utility salesmen by Minneapolis Gas Company were all-expense-paid trips by plane to Milwaukee to see the Milwaukee Braves-New York Giants game.

Southern Counties Gas Company's "Pebble Beach" campaign was named after the prizes, according to Frank N. Seitz. The five top salesmen and wives were awarded a weekend trip to Pebble Beach, California. (Where President Eisenhower took a vacation after the GOP convention.)

Dealers in Washington Gas Light Company's territory were divided into three groups depending on past gas range business. L. B. Foy explains that prizes were awarded on a point basis in relation to dollar volume per range, with premium points credited to "Matchless" sales. A $50 weekly prize was awarded salesmen in each group with highest number of points. In addition, campaign prizes of $150 and $75 were given the high man in each group.

Western Kentucky gave each employee who sold six ranges in September and October a turkey or ham for Thanksgiving Day dinner.

The "Dress Up" Gas Range Campaign put on by Northern Indiana Public Service meant that dealer salesmen could earn a complete wardrobe of clothing, plus cash. A representative wardrobe was displayed in sales-meeting rooms of larger towns. Each salesman was represented by a cardboard figure, that was dressed step-by-step as he made sales.

Hartford Gas Company salesmen were divided into two groups. The group with the biggest sales points at the end of the Spring Carnival was taken to New York to a ball game, dinner, etc., all expenses paid. This company also had a "Lucky Salesman" drawing once a month for a $25 award. The drawing was from cards, each listing the range sold and salesman's name.

L. W. Stone states unreservedly that Springfield Gas Light Company's Spring promotion was largely due to the unusual bonus plan. Retail salesmen received a 5-cent bonus for the

first range sold and the bonus doubled with each range up to the 12th. A salesman could make $102.40 for the 12th range sold, and a total of $204.75 in bonuses.

For Customers

How much customers are attracted by premiums would be hard to evaluate. Some mighty good promotion men use the idea and many salesmen agree that premiums help to create a cordial feeling and inspire greater interest.

Here are some premiums given with each range purchased: Coppertone canister set, $20 hat from local store, turkey, Pied Piper doll. J. J. Sheehan of Piedmont Natural Gas Company says a $14.95 skillet will be given this Fall with each range sold.

In Atlanta Gas Company's Centennial promotion special features could be purchased "For 1¢ more," Gussie O. Jones reported. Tem-Trol on a Roper range cost 1¢ more and large Family-Fare Oven in a Magic Chef cost 1¢ more.

Premiums to prospects include plate scrapers, cake knives, aluminum cooking utensils, Lilly Dache hose; balloons and lollipops for children.

Special Gimmicks

What catches the attention of customers and turns their attention to buying?

What is the effective last straw that makes a woman or a man say "I'd rather have this gas range than anything else I can buy for the same money."

It may be the persuasion of a salesman who is really interested because he needs another sale for a desired prize.

It may be the eagerness of a housewife for one of the exciting new features — or for all of them.

The last straw may be that the old range already has a broken back.

It may be that "keeping-up-with-the-Jones" compulsion that has ever moved us to higher living standards.

It may be the interest and delight in a bargain.

Nearly every possibility has been tried in gas range campaigns and here are some extra gimmicks that wise promotion men have found help sell.

ATLANTA GAS LIGHT COMPANY'S
BIG Centennial Special!
For only 1¢ more
"FAMILY FARE"
...the world's largest gas range oven
Magic Chef
Down Payments as low as $10
Trade-in Allowances up to $60
Other Magic Chef features that give you the last word in cooking convenience
Purchase Price includes Proper installation in your Home
Convenient Monthly Payments with your Gas Bill
1856 1956
ATLANTA GAS LIGHT COMPANY
Atlanta's Oldest Business Citizen

Atlantic Gas Light Company celebrated its hundred years with a Big Centennial Special. "For only 1¢ more" a customer could have Tem-Trol or Family-Fare oven. Promotion brought a 61 per cent sales increase.

"Miss Matchless Modern" has invaded New England and proved she can help sell gas ranges. Boston Gas Company and Mystic Valley Gas Company developed excellent campaign around the figure. Use by several neighboring companies provided cumulative effect.

Central Hudson Gas & Electric Corporation has done more range-selling with Thanksgiving and Christmas turkeys than any other gimmick, R. B. Denhardt reports. The same promotion has been used for seven years and every time the sales exceed the quota.

Key to the "Partners in Progress" sale of New Jersey Natural Gas Company was enlisting help of wives, William J. Miners stated. Wives of salesmen were the "Partners" and won points.

Lilly Dache nylon hose were sold to customers of Equitable Gas Company on a "self-liquidating" basis as a traffic builder, R. L. Conover reports.

D. E. Frieden of Zenith Gas System describes 10-year service warranties as a special feature of the 1955 Round-Up. These were presented to dealers who in turn issued one with each gas range sale. The service policies were endorsed by the company.

A successful campaign conducted by Washington Natural Gas Company, Seattle, in 1949, which was reported by Norbert O. Fratt in several magazines, used a hat gimmick. Each customer who bought a range was presented with signed check which could be exchanged for a $20 hat from a local store.

Another twist in this Seattle campaign was the arrangement for the salesmen's dinner. They listened to a demonstration by the home economist while she cooked vegetables and then each one chose his own steak and cooked it himself. This way he learned exactly how the range worked.

"Miss Matchless Modern" sparked the Fall campaign of Mystic Valley Gas Company last year. All advertising was identified by this symbol — a silhouette of a girl in a broad-brimmed black hat. Our illustration of Miss Matchless Modern is from Boston Gas Company, which used the promotion this Spring and plans to follow the same theme this Fall because sales exceeded expectations, William H. Geller, Jr. reports.

A. G. Blitz of Wisconsin Public Service Corporation reported the gimmick that worked in the Pied Piper Old Range Round-Up was the fact that for a $10 fee the dealer received a complete window or floor display kit and six dolls. The gas company's display department set them up for the dealer, to assure proper use of the display. On the opening day of the campaign there were 21 displays alike in the community. The give-away dolls added greatly to making colorful displays.

Analysis of Results

If you can find the keys to a successful selling campaign, you are halfway to success for your own promotion. You need knowledge to plan; energy and initiative to put over the project. This survey gives you a base for planning.

Nearly every company vice president or sales manager said

first that cooperative effort, careful planning, and maintained enthusiasm equal successful sales.

One reason we went into personal contact so thoroughly is that this phase looms large in a successful selling campaign. Carl J. Olson of Central Electric & Gas Company explains that his company does not depend on floor traffic for its successful sales but directs (1) house-to-house canvassing, (2) call-backs on former prospects, (3) using the user, and (4) tips from employees.

Oklahoma Natural Gas Company's campaign included a personal call by a company representative at the home after the sale and call on a prospect in the same block. This was just one angle — but an important one — in the success of the campaign.

Atlanta Gas Light's Centennial Sale went over principally because the salesmen worked as hard or harder than they ever had. Pittsburgh Group Companies found that incentives for dealer salesmen are the core of a good campaign. Any personal benefit, George W. Coulter says, a salesman can derive will enhance the possibilities of a successful promotion.

Employees and customers have become accustomed to the Old Stove Round-Up after many years, Alabama Gas Corporation reports, and this fact helps put it over. It is important that the campaign is thoroughly understood by employees and dealers so a repeated campaign does have cumulative effect.

This difficulty was apparent in an analysis of results in Consumers Power Company's seven-week Automatic Top Burner campaign. For the utility company 21 per cent of total sales were with thermo-controlled top burners; for dealers only five per cent of total sales were automatic. L. L. Clemmer thought this was an indication of the need to educate dealers on upgrading opportunities.

Ohio Fuel Gas Company found sales per dealer disappointing although the sale was considered successful. Here again is the problem of creating and maintaining enthusiasm for a campaign over a large area for a definite period.

Intensive effort made to acquaint dealers and employees with campaign plans is given by Washington Natural Gas as the spark for its promotion.

Factors in its successful campaign are listed as these by Minneapolis Gas Company:

1. **Planning months in advance,**
2. **Close distributor, manufacturer cooperation,**
3. **Quotas assigned to each dealer,**
4. **Salesmen incentives for:**
   a. **Total sales,**
   b. **Highest average unit selling price,**
5. **Semi-weekly follow-up with dealer during promotion.**

In the Shane store campaign (Southern California Gas Company) the owner credited "Proper display, a lot of planning and advertising, coupled with a thorough product knowledge" as the reasons for rise in sales percentage.

Wisconsin Public Service people believe proper display made a vital difference in its promotion. "We learned from this campaign how much dealers appreciate assistance in setting up displays. While most appliance dealers realize the importance of display, very few of them are in a position to devote much time to it."

Gas companies in the Greater Boston area are concentrating on an upgrading promotion that has been very successful. Nearly everything sold is CP and/or temperature-controlled top burners.

D. B. Jobson of Milwaukee Gas Light Company described upgrading of ranges on dealers' floors and more live ranges connected on dealers' floors as a good result of his company's Spring Campaign.

W. L. Miller of Mystic Valley Gas Company believes the repeated use of "Miss Matchless Modern" by cooperating companies has been helpful in this upgrading program.

The Prospect Parties given by Philadelphia Electric Company two months in the Spring and two in the Fall owe their success, of course, to personal contact. The 6.3 average sales per demonstration in the Fall of 1955, shows excellent results. Also definite sales come from follow-ups and dealer good will is built up.

Main factor in good sales results is the design of modern ranges, with new features for better living. The Peoples Gas Light and Coke Company shows here why 9 out of 10 Chicago families are buying gas ranges.

J. H. Snyder of Northern Indiana Public Service gives this list that contributed to the campaign's success:

1. **Careful planning,**
2. **Campaign presented to salesmen at dinner meetings with adequate fanfare (Enthusiastic response),**
3. **"Special" ranges featured—also special terms provided,**
4. **Attractive progress bulletins sent weekly to salesmen,**
5. **Follow-up product meetings with salesmen by manufacturer's representative,**
6. **Appropriate floor and window displays,**
7. **Bus cards, billboards, and radio spots used,**
8. **Adequate newspaper advertising.**

Perhaps the main factor in good results, as suggested by the successful Philadelphia Gas Works' Spring campaign, is the new design in automatic ranges. John F. Short said that the 1955 Fall campaign, that introduced thermostatically controlled top burners, accelerated sales of Matchless gas ranges from then on. The promotion has a cumulative impact and future sales will feel a building of interest in the delightful new ranges, the irresistable new features.

These are the range-selling methods that have proved successful. Next we open the pages of a great fair of new range designs. Modern ranges and modern selling methods will make your next range campaign a big success.

Modern? You said it! No matter what feature the housewife wants in the equipment she uses for cooking meals, she can find it in the . . .

World's Most Beautiful Ranges

A six page catalog of modern gas ranges and built-ins

THE biggest reason for large, successful gas range sales is found on the next six pages. They are the cooking tools of today's housewives — beautiful in design and colors, efficient in operation, automatically controlled.

Never has a homemaker had such varied and useful service from her most important equipment. It gives her freedom from the kitchen — freedom of action.

You can have built-ins or separates and even separates that look like built-ins. You can have almost any size, shape, and color. Delightful kitchens are part of today's high standard of living.

Looks aren't everything and in ranges, appearance is only the beginning. A modern gas range will do countless services. It is a quiet, perfect, very inexpensive servant.

You can have a swing-out broiler; you don't have to lift out the meat to look.

You can have needle-type pilots that use so little gas there is no heat.

You can cook exactly right in the oven by pre-setting an automatic clock control to start and stop cooking all by itself.

You can lift or lower the broiler with a finger touch to move your food nearer or farther from the flame to get exactly the heat you want.

You can wash top burner tops just like you do a utensil. They are clean in a few seconds.

You can have top burners that regulate their own heat at whatever temperature you dial — the "burner with a brain."

You can have a built-in griddle with heat control, too. The griddle lifts out for cleaning.

You can have the largest oven in the market with capacity for big families.

You can have insulation that will keep your range cool. You can touch your oven when it is at high heat.

You can have a barbecue oven with built-in motorized rotisserie or a triple spit arrangement that will handle six small fowl.

You can have a whole broiler section that can be lifted out and cleaned or an attached holder for aluminum foil so you can cover the oven bottom and remove for spillovers.

You can have a fluorescent lamp that swings up or down and rotates forward or backward for better lighting.

You can have almost any number of top burners in almost any arrangement you want.

You can have a kind of cook-book on a dial to give proper cooking times and temperatures.

You can have an automatic meat thermometer, which registers on a dial on the range panel.

So turn the pages and look long at the biggest gas range exhibit ever gathered in one place. You'll find the most important part of the home — the cooking equipment — has taken on beauty and automation.

Florence Company, 1459 Merchandise Mart Plaza, Chicago, Ill.

Tennessee Stove Works, (Modern Maid), Chattanooga, Tenn.

Dixie Products, Inc. (Dixie), King Edward Avenue, Cleveland, Tenn.

Florence range has a Roto-Broilercue with a built-in meat thermometer which shows exactly when meat is done. The range is available in four colors. **Modern Maid** has a built-in griddle with removable cover. It also has a Dial-a-Temp cooking chart. You dial the food you want to cook and automatically have the length of time required and the correct temperature. **Dixie** range also has the built-in griddle with removable top which allows working space when not in use. Its clock is conveniently large.

This **Roper** range shows the Comfort-Level broiler and the top burners with staggered spacing. Roper's Tem-Trol makes an automatic cooking appliance out of every pot and pan. Roper also has the new Visi-Flame top burners, which are scarcely over an inch wide and control the flame perfectly. **Gaffers & Sattler** built-ins here come in 8 decorator colors and white. The oven has the built-in rotisserie and a simplified "elevator" that allows meats to be raised or lowered as broiling requires. The thermostatic top burner is called the "Thermo-Eye."

Geo. D. Roper Corp., Rockford, Ill.

Gaffers & Sattler, 4561 East 15th Street, Los Angeles, Calif.

Gurney Products, Ltd., 380 Ste. Croix Boulevard, St. Laurent, Quebec, Canada.

Moffats, Ltd., 23 Denison Road, Weston, Ontario, Canada.

Crown Stove Works, 4627-35 West 12th Place, Chicago, Ill.

Chambers Ranges, Inc., 2464 N. Meridian St., Indianapolis, Ind.

Tappan Stove Company,

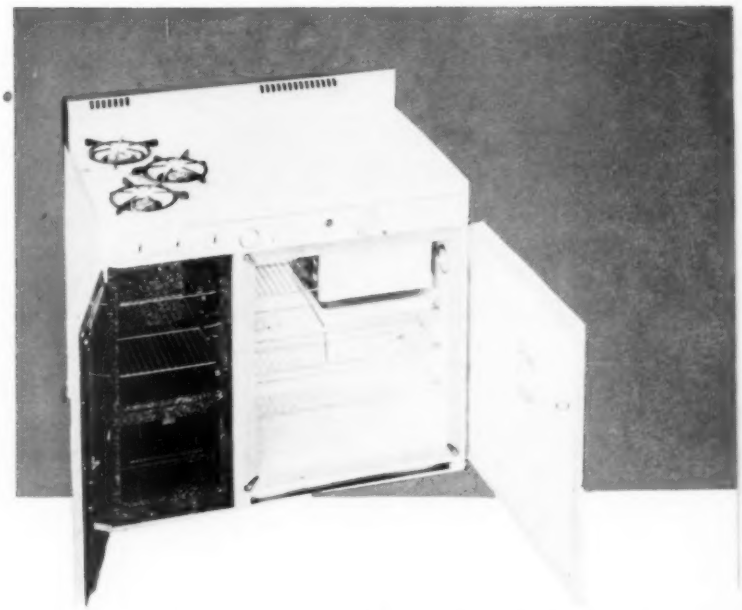
Cribben & Sexton Company (Universal), 700 N. Sacramento Blvd., Chicago, Ill.

One of the latest **Gurney** ranges is just being introduced to Canadian markets. The automatic surface burner is called the "Educated Burner" by the manufacturer. **Moffats** of Canada has a 21-in. oven in this 24-in. model. The fluorescent lamp is full width. Shown is the large Simplimatic clock with a 60-minute timer. **Crown's** new space saver 30-in. gas range is the company's fastest moving model. The **Chambers** Jubilee model has an In-a-Top Speed broiler and griddle. It rises range top high at a flick of your wrist. It is heavily insulated. **Cribben & Sexton's** Universal built-ins feature the Uni-Temp thermostatically controlled griddle, heat controlled top burner and the roast master which provides automatic shut-off of the oven when the roast obtains a certain temperature. A silicon gasket on the door units eliminates heat losses and helps to keep the kitchen cool and keeps outer surfaces comfortable to the touch.

Athens Stove Works, (Vesta), Athens, Tenn.

John Wood Company (Bengal), Royersford, Pa.

250 Wayne Street, Mansfield, Ohio.



General Air Conditioning Corporation, 4542 East Dunham Street, Los Angeles, Calif.

O'Keefe & Merritt Company, 3700 East Olympic Blvd., Los Angeles, Calif.

Vesta is shown here with five burners and a double oven, one of the popular range features. **Bengal** offers the top burner heat control and center simmer burners. Special ball bearings provide smooth sliding of broiler back and forth. The ultra modern kitchen with the **Tappan** built-in oven and top burner comes in six colors. The large completely automatic oven has a see-through window and a second broiler for snack cookery. Top burners are automatic. **General Air Conditioning** builds motel stove and refrigerator combinations like the General Chef shown. Three burners, oven and broiler are on one side and refrigerator is on right. **O'Keefe & Merritt** built-ins are shown here in this all-gas automatic Holiday Kitchen with Joseph H. Schulte, the president of Holiday Kitchens, and Justin Kennedy, head of Southern Counties Gas Company. The girl, Janice Johnson, is Home Show Queen. Automatic oven, broiler, and top burners are on the right.

Monarch Ranges, Beaver Dam, Wis.

Welbilt Stove Company, (Detroit Jewel), 58-17 Flushing Ave., Maspeth, Long Island, N. Y.

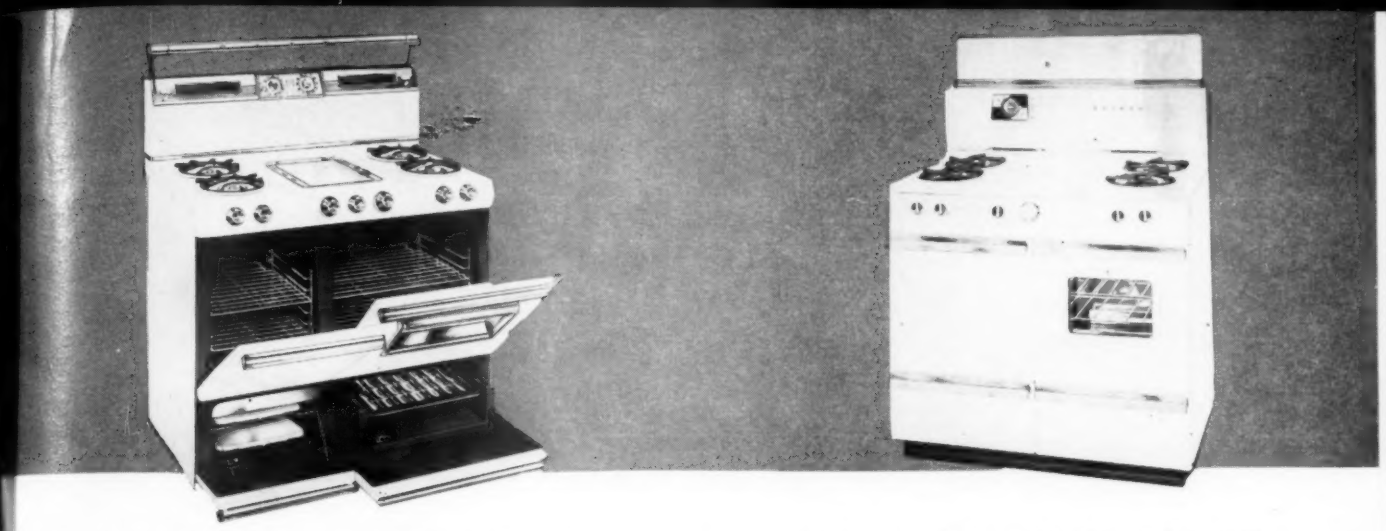
Samuel Stamping & Enameling Co., (Suburban), Chattanooga, Tenn.

Harry C. Weiskittel Company (Real Host), 4601 Pulaski Highway, Baltimore, Md.

Western Stove Company, (Western-Holly), 8536 Hays Street, Culver City, Calif.

Monarch range shown has an exclusive built-in surface oven on the right. Flush with cooking top, it can be used for working space, when not in use. Monarch also has center simmer burners and automatic oven lighting. Welbilt's **Detroit Jewel** has a radiant rotisserie besides oven and broiler. A similar model has thermostatic control on the griddle or it can be obtained with a fifth burner instead of the griddle.

Western-Holly calls its stove the built-in "Kook Center." The Kook Center has a full width utility shelf in chrome, a frosted and completely built-in full width fluorescent light, a ventilating fan. Extra heavy insulation gives protection for installation. This range has a top burner tempa plate, two burners equipped with Thermal Eye and four



Norge Div., Borg-Warner Corp., Merchandise Mart Plaza, Chicago, Ill.

Sunray Stove Company, 155 South Sandusky Street, Delaware, Ohio.

with rocket center simmer burners. The right oven is a thermal barbecue. **Real Host Crusader** shown here is a built-in gas range complete with porcelain enamel oven and top burner cabinets. This gives the built-in look although it is free standing. Focal point of this lovely kitchen is the **Suburban** gas built-in range units. Top burners are divided with a grill. Two ovens and broilers are provided on each side of the cabinets.

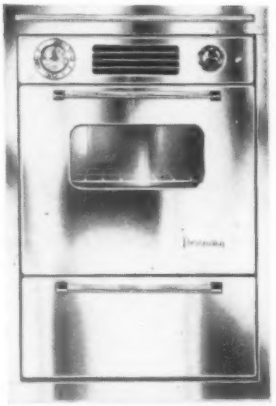
The **Norge** model shown has balanced heat double oven with the 21 in. master oven fully automatic, and with picture window and the handy 14 in. thrift oven for everyday baking. Both ovens have mini-pilot automatic ignition. Norge calls its furnace burners the Alltrol. The Adjust-a-Lite swings up or down as needed. **Sunray** range exclusives are the Catcholator which traps and wraps all oven spill-overs, the Space Maker shelf which can be moved up or down on the top of the stove and Charcolator which uses the infra-red ray principle. **Preway** ovens and broilers are built-ins only.

Dwyer kitchens have four burner gas ranges, a combination oven and broiler, one broils at the top of the oven, the drawer below is for storage, made specially for a compact kitchen in efficiency apartments or motels. **Hardwick's** new built-ins have a counter top unit with twin burners which can be arranged two or three in a row as shown here. It has thermal and knob controls, automatic lighting is standard with automatic gas shut-off in case flame is extinguished.

Reprints of Merchandise Round-Up and Gas Range Fair available at these prices:

1 to 25	25¢ each
26 to 100	20¢ each

Write for price quotations above 100 copies of this 16-page Gas Range Promotion Round-Up.



Preway, Inc., 1430 Second St. N., Wisconsin Rapids, Wis.

Hardwick Stove Company, Cleveland, Tenn.

Dwyer Products Corporation, Calumet Ave. & Holiday St., Michigan City, Ind.

Magic Chef, Inc., 1641 S. Kings Highway, St. Louis 10, Mo.

Magic Chief has a Family-Fare oven measuring 26 in. surrounded by 4 in. of thick insulation and with a heavily insulated door. Family-Fare is the largest gas range oven on the market. The Outamatic broiler comes forward as the door is opened, placing the cooking food in a convenient position for turning or removing. **RCA Estate** has top burner heat control in the center which can be a grate or a griddle. The open compartment is a Bar-B-Kewer meat oven. The baking oven is at the right; both have windowed doors.

Caloric gas range has a high broiler and a Roto-Ray Barbecuer. The thermal-set-equipped surface unit has a 30-in. base cabinet. Caloric comes in three decorator colors, minty green, frosty blue, rosy pink, and cool white. In the regular range Caloric has an extra large oven, a high broiler and low broiler.

Wedgewood has a convenient shelf beneath the clock for extra working space. This model has a center griddle dividing the four top burners and two ovens. **Glenwood** range has the Charcolator meat oven. The oven is heated to radiant heat to barbecue.

RCA Estate Appliance Dept.,
Radio Corp. of America, Hamilton, Ohio

Caloric Appliance Corporation, 12 South 12th Street, Philadelphia 7, Pa.

Wedgewood Division, Rheem Manufacturing Company, 7600 South Kedzie Ave., Chicago, Ill.

Glenwood Range Company, 584 Commonwealth Avenue, Boston, Mass.

Merchandising News

San Antonio Test Kitchen Installs Florence Gas Range

The Home Service Division of the San Antonio City Public Service Board decided it was time to educate the housewife with the automatic top burner since 80 per cent of the cooking is being done on top of the range.

The board has installed in their cooking school and test kitchen a Florence gas range, featuring the "Governess", a simple, gas burner device with a built-in heat control that allows the burner to cut down the temperature automatically when the desired temperature is reached.

Two gas company officials in Grand Rapids, Michigan, inspect the interior of the new Ruud multi-coil automatic gas water heater. The Model 500A circulating tank was among units displayed by Ruud Manufacturing Company at a commercial water heater caravan held in several Michigan cities. V. J. Plouffe, technical assistant in the Ruud commercial sales department, points out features of the model to Leonard Verschoor (center), industrial sales manager, and Charles Stillman, commercial salesman, both of the Consolidated Gas Company in Grand Rapids.

A model 1957 all natural gas kitchen has been put on display by the New Jersey Natural Gas Company on the first floor of its building in Asbury Park, New Jersey. Kitchen is decorated in pink and charcoal, with all appliances and cabinets finished in pink, with charcoal wallpaper and decorations. One of the new features is a multi-colored brick charcoal barbecue operated on gas. Also on display are a pink-panelled built-in oven, a washer and dryer that washes and dries clothes in one operation, a Servel refrigerator with the Icemaker, and the range-top burners with automatic controls.

Top Burner Testimonials Featured in Roper Booklet

Actual users of Roper gas ranges equipped with the new "Tem-Trol" automatic top burner furnished the information recently published in a 12-page two color booklet. Questionnaires and personal interviews were used to obtain owners' opinions.

The booklet is produced in two sizes: 8½ by 11 in. for sales training and display floor use, and 6 by 7¾ in. for mailing and handing out to gas range prospects.

Caloric Adds New Series To Gas Range Lines

Caloric Appliance Corporation has added a new group of deluxe gas ranges to its line. Designated as the "One" series, the ranges are available in 30-in. and 36-in. models featuring a newly designed background that has concealed oven venting, a built-in electric clock with sweep second hand and easy-to-set timer, and a convenience outlet.

Top burners are Tri-Set 12,000 Btu type with click-top controls for high heat, simmer and keep warm plus the full range of cooking temperature from low to high. Optional on the "One" series is Thermo-Set.

Ovens on both size models are 4300 cu in. capacity with fiberglass insulation, oven window and interior light for visual inspection of roasting and baking operations, and Oven-Trol, combining heat control with automatic pilot valve. Broilers are the hi-lo smokeless type with removable doors.

Concealed leveling legs are designed for easy leveling on any floor, the range can be installed flush to wall and floor.

Golden Era for Dryers Is On the Way

More than 2,250,000 automatic gas and electric clothes dryers will be sold within the next 12 months at the home appliance enters its "golden era," according to an industry executive.

Harold Bull, director of distribution, Norge Division Borg-Warner Corporation, told a distributor conference recently that 10,300,000 dryers will be sold by 1960, when dryers will reach 29.2 saturation mark.

"As far as dealers are concerned, the dryer is an easy appliance to sell and the dealer does not have to handle a trade-in either," Bull said.

He explained the "golden era" of a gas or electric appliance is that time when saturation is between 9 and 30 per cent. Dryers now in about 10 per cent of America's homes, are on the threshold of this area.

Modern Gas Range Uses Old-Fashioned Idea. Magic Chef, Inc. is going into production on three new range models featuring the combination kitchen gas range and heater. Top model (shown) has a suggested retail price of $349.95.

Schoolrooms are Prefabbed As Separate Units

Today's "little red school house" is being prefabricated in parts and then shipped out to communities throughout the country for assembly according to an article in the August issue of *Architectural Record*, professional magazine for architects and engineers published by F. W. Dodge Corporation.

The article "Structural Components for School Buildings," describes the process of designing and manufacturing separate units of school buildings that can be ordered as needed and fitted together to meet the varying requirements of communities. The process was accomplished through the cooperation of the architectural profession and the manufacturing business.

Mass production of pre-fabricated parts is practical in school construction, it is stated, because of the need for flexibility, reduction of on-site labor, low initial cost and low maintenance charges, multi-purpose components, and general availability of the parts.

Canadian Appliance Sales Show Increase for May

Gas appliance sales in the Lower Mainland area of British Columbia during the month of May, according to figures tabulated by the B. C. Electric at Vancouver, B. C., showed a marked increase, probably as a result of the natural gas pipe line under construction to Vancouver. Two hundred thirty-two ranges were sold, as against 182 a year ago, and 288 water heaters, as against 192, while 259 central, forced air heating and 8 central, gravity gas furnaces were installed, as well as three circulator heaters.

Smokeless, Odorless Incinerator Designed As Kitchen Unit

Burn rubbish and garbage in the kitchen! Waste King Corporation has designed a kitchen appliance to be used as a new smokeless, odorless home incinerator. After more than four years of research, the incinerator will go into production at their Cleveland plant shortly after the first of the year.

The incinerator, with foot-pedal operated charging door, is encased in a modern cabinet to match streamlined service porch and kitchen interiors. It will dehydrate and consume all ordinary household combustibles such as garbage, paper, wood, rodents, and small birds.

The key to the unit's efficiency is a multiple burning chamber, with fly ash trap, and an after-burner that reduces exhaust gases to carbon dioxide and steam. The incinerator, depending on the moisture content of the refuse, will consume up to two bushels in from one to four hours.

The ash trap consists of a settling chamber into which particles of 50 microns or large drop during the burning process. Particles smaller than 50 microns become part of the gas stream and pass through a ceramic maze that reaches temperatures of up to 1200F. This ceramic acts as a catalyst to speed consumption of pollutants before they reach the atmosphere.

Time to Turn to Gas Incinerators!

The mountains of paper disposables, wrappings, cartons, and other combustibles flowing into the American home has been a boon to predicting the broad gains for gas incinerators, according to reports given a recent meeting of the incinerator division of the Gas Appliance Manufacturers Association.

The incinerator, relatively new in the gas appliance field, has been growing in acceptance. Sales for the first half of 1956 are reported 11.4 per cent ahead of the corresponding 1955 period, and for all 1956 a 20 per cent gain is anticipated.

It has been estimated that at least 10,000,000 tons of paper are thrown out every year in American homes — more than 400 lb per family. And, this must be burned in the home, or carted away.

Modern gas incinerators, according to Frederick H. Martin, division chairman and vice president of the Martin Stamping and Stove Company, Huntsville, Alabama, are proving their ability to handle mounting quantities of combustible packaging materials along with the family garbage. The shift is from garbage disposal to paper disposal whenever a prepared food replaces one the housewife used to pare, trim, or shell for herself.

The household gas incinerator is being accepted by a growing number of municipal officials, Martin said. He attributed this to recognition that the gas flame destroys smoke and odors in a way that ordinary combustion cannot duplicate, and that it can cut a substantial slice from the taxpayers' bills for garbage and trash removal.

Southern Gas Association's 1956 Home Service Conference held in Shreveport in July was host to 56 representatives from 20 companies. Head table of the luncheon include the following: (left to right) Jessie McQueen, home service counsellor of the American Gas Association, who spoke on "New Features on Gas Ranges"; J. L. Sutton, Delta Air Lines, who spoke to the group on "Public Relations"; Emagene Burge, home service director, United Gas Corporation, who served as sponsor of the SGA Home Service Conference; E. L. Henderson, vice president, United Gas Corporation; Ann Mitchell of Monroe, Louisiana, "Mrs. Louisiana for 1957"; L. P. Thomas, vice president, Houston Natural Gas Corporation, who is chairman of the SGA Sales Section; and Shirley Pemberton, home economist, Robertshaw-Fulton Controls Company, who discussed "Automatic Controlled Top Burner."

Southern Union proves

Employees Have Good Promotion Ideas

You may be harboring sales ideas galore, here's how one company dug 'em up

Grand prize winner, Jeanne P. Dabney, Southern Union's division home service director, Albuquerque, New Mexico, is presented with a $250 check as contest winner by the company's president, C. H. Zachry.

Nearly 1000 entries posed a tabulation problem for the company's publication production manager, Maurice Middleton.

Judges of Southern Union's slogan contest are, left to right, Alta Ewalt Evans, advertising and publicity director; David J. Kerr, director of business development; and Ethel O'N. Johnson, assistant secretary.

"Your Servant Seven Ways, Seven Days a Week."

This effective theme took grand prize honors in a recent slogan contest sponsored by Southern Union Gas Company for its employees.

Launched to stimulate employee interest in informing the public of the merits of natural gas, the contest offered $1190 in cash awards and drew an overwhelming response of 985 entries from the company's 1800 employees. Rules required that the entry be a short phase of eight words or less, suitable for use in the company's advertising and promotion.

The contest was open to all regular employees of Southern Union except members of the Business Development Department. Contestants were permitted to submit as many entries as they wished and all entries were mailed to a post office box in Dallas, processed and given number identifications to insure anonymity in judging.

Mrs. Jeanne P. Dabney, division home service director for Southern Union in Albuquerque, New Mexico, was the originator of the grand prize-winning slogan. She grossed $250, including a first prize of $50 in her district and the grand prize award of $200. Presentation of the grand prize was made to Mrs. Dabney in Dallas by C. H. Zachry, president of the gas utility company.

The contest produced 32 other top-ranking slogans, with first, second and third prize winners in each of Southern Union's 10 districts and in the company's headquarters in Dallas. It revealed not only a tremendous amount of employee enthusiasm, but offered many potential ideas for future company promotion. * * *

Gas-Fired Paint Finishing System

Speeds Production For Appliance Manufacturer

HIGH production-line techniques are setting the style for a completely integrated gas-fired paint finishing system at Utility Appliance Corporation of Los Angeles that has led to labor and material savings and product improvement.

Twin conveyors snake their way through an entirely new 105,000-sq ft building providing maximum flexibility and economy for processing a great variety of pieces without shutting down, slowing, or changing the operation.

Proof of the performance can be summed up in two examples:

(1) the same amount of work can now be accomplished in one shift that formerly required three; and

(2) one barrel of paint is now used where five barrels were formerly needed.

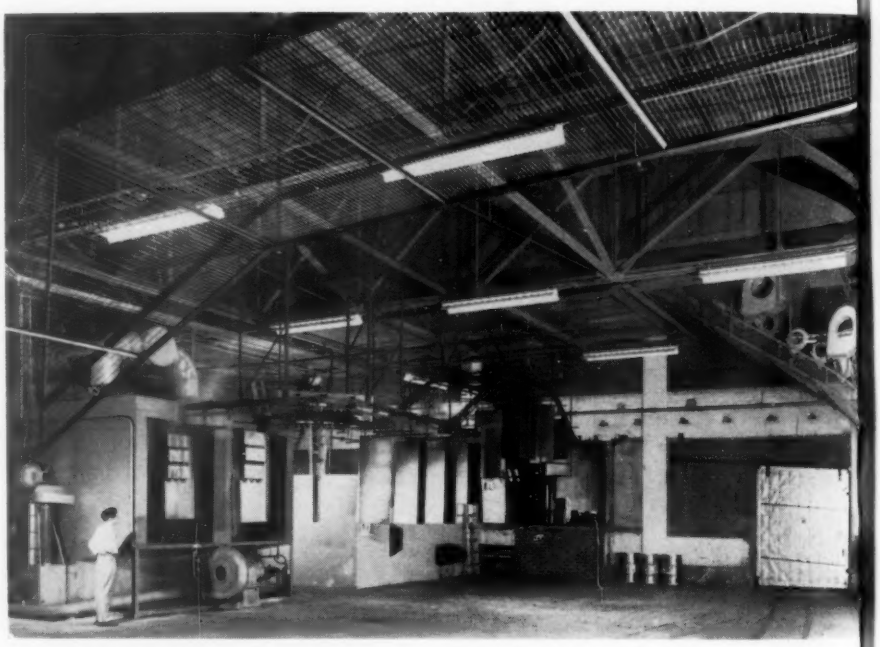
Work totaling 20,000 lb per hour, consisting of scrolls, wheels, panels, and other intricately designed parts and sub-assemblies can be processed through the system, thus pointing up the production-line aspects of the operations. In addition to the advantages of increased capacity and greater economy, this new system assures precisely controlled uniform quality for all finished products, almost regardless of size or shape.

This finishing system, which has been termed "the most modern and efficient of its kind in the metal products industry today," represents just one ramification of the consistent and substantial expansion at Utility since World War II.

As sales volume increased during the postwar years for Utility's four major divisions, which manufacture gas furnaces, heaters, ranges, coolers, air conditioners, and blowers for home and industrial use, expansion of the physical plant became an apparent necessity.

Production capacity was not the only consideration in Utility's decision to expand. Top management and production executives felt that considerable improvement in production flow could be obtained through revitalized plant layout, made possible with additional area. Excessive travel and material handling, particularly through subassembly, finishing, final assembly, warehousing, and shipping operations, were prime considerations in the remodeling.

Twin conveyors start (center) in original building. From load-on points they pass through double fire-doors into new building and take a 90-degree turn into five-stage double tunnel phosphate coating unit. Overhead (right) conveyors pass through long drip-off housing and vapor tunnel, and enters ceiling-hung bake oven.



Adjacent to the main plant on property already owned by the company, the new 105,000-sq ft concrete building was constructed to supplement an existing 200,000-sq ft of production space.

As a well-integrated operation already existed within the original plant, careful planning was required to achieve an optimum layout of the enlarged plant with a minimum of shifting of expensive machinery installations.

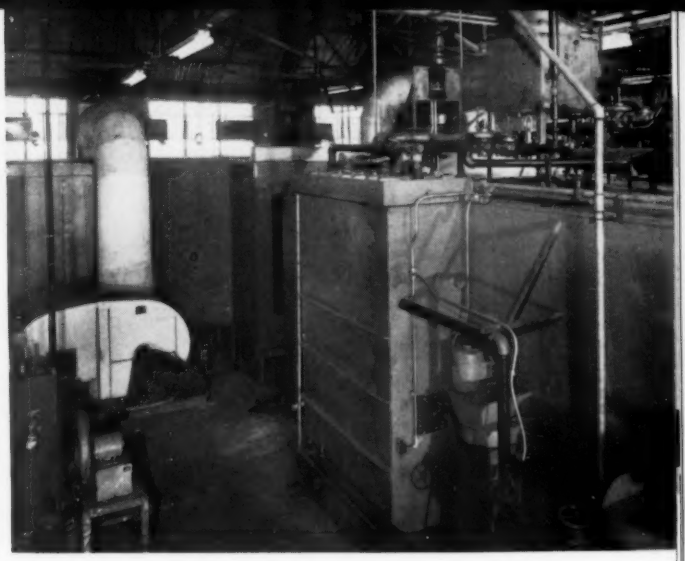
Heart of the new building is a fully conveyorized finishing system designed and erected by N. Ransohoff, Inc., Hamilton, Ohio, a company that has pioneered in the creation of equipment for the surface treatment of metals since 1916.

The finishing system is a double tunnel, double conveyor type, over 1200 ft on each line, either side of which can be operated independently of the other. In approximately one hour the entire finishing process of cleaning, phosphatizing, drying, spray painting or flow-coating, and finally paint-baking of various parts can be accomplished in one continuous operation.

The finishing operation starts in the old building where the twin conveyors are loaded with parts flowing from the press and welding departments where the pieces were fabricated. Whether the parts are to be spray painted or flow-coated determines which of the two overhead monorail conveyors the work is hung on.

First step in the finishing is a five-stage phosphatizing unit. One Monorail

Double conveyors split, left line passing through a 45-foot deVilbiss water-wash spray booth where parts may be sprayed with any one of ten different paints. Second line enters a tandem flowcoater. Tandem arrangement provides for rapid change-over of colors as well as to provide stand-by equipment in the event of a breakdown. Flowcoater replaces dipping method and requires only 150 gallons of paint storage.



End of five-stage phosphate coating unit (right) shows part of equipment which includes separate gas burners, controls and heaters for each of the five stages. The twin conveyors then enter the dryoff oven, which operates at a temperature of about 400 degrees.

conveyor about a quarter of a mile long passes through each side of the machine. In this process, the parts are first subjected to a high pressure alkaline spray wash in order to completely remove oil, grease, and chips. Next, after being rinsed with hot water, they are sprayed with a hot phosphate solution that improves paint adhesion and resists corrosion. Following a cold water rinse, to remove any excess phosphate solution, the parts are finally sprayed with a hot chromic solution to set the phosphate coating. Heat imparted by this sequence assists in the drying process.

Each zone of the phosphatizing machine is equipped with its own gas burners, controls, and heaters, so that each may be independently operated when required. In setting up this system, Ransohoff engineers had to comply with Utility's requirements that the temperature of the hot rinse, the phosphate solution, and the chromic solution be individually maintained within very exacting limits. They also were required to provide a system that would reduce maintenance to a minimum by eliminating so far as possible the build up of deposits that accumulate on submerged flues. In order to do this, they designed an entirely new type of direct fire gas burner which is now called the Ransohoff Cascade Burner.

In the operation of this heating process, solutions that have been pumped to the top of a large combustion chamber cascade downward over a staggered series of louvre-like pans, allowing the gas flame — which is directed downward from the top of the chamber — to alternately pass over and through the cascading solution. The heated solution is then pumped to the spray section from the tanks into which it has cascaded and finally is again returned to the top of the heating chamber to begin the cycle anew.

Automatic Burner System

The operation of these direct-fire burners is completely automatic. When the pumps are operated, the gas is spark-ignited at the burners. Safety devices include flame failure equipment, as well as gas, air and solution pressure switches. This new type heating offers great savings in gas consumption by eliminating heat loss through high temperature exhaust flue gasses and low heat transfer through immersion tube walls. Furthermore, products of combustion are exhausted into the machine where they are picked up by the normal exhaust system, thereby eliminating the usual exhaust stacks.

This type of gas burner was requested for several reasons. First, the heater cannot be burned out, because the water keeps the metal cool at all times. Secondly, there are no parts that can be clogged by deposits of solution, thus requiring no cleaning. Third, maximum efficiency is maintained at all times. Initial cost of this method is somewhat greater than with the conventional immersion tube installation.

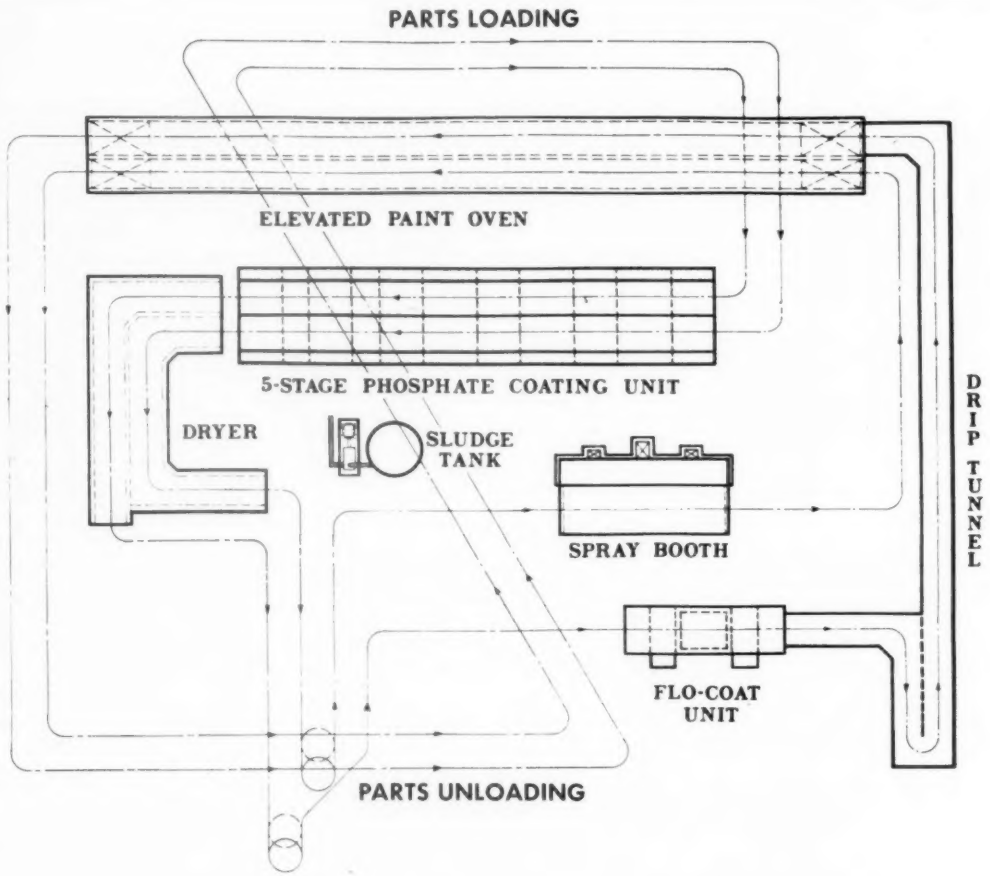
This, however, is offset by decrease in the maintenance and down time usually required under the normal system as the tubes become heavily coated with the solution and lose efficiency. The new, direct-fired system is equipped with Eclipse proportioning mixes and burners with Wheelco Flame-O-Trol safety devices and Partlo temperature controllers.

Another unique design for this phosphatizing unit is that the gas-input has been designed to bring all solutions up to operating temperature within a half hour. This means a tremendous saving in start-up time, man hours, and in operating cost.

From the phosphate-coating line the parts are conveyed to the dry-off oven, which operates at a temperature of about 400 degrees. At normal conveyor speed, the phosphatized parts are subjected to this temperature for about four and a third minutes. This oven is also double-tunnelled, and is direct fired, with air recirculated, exhausting a small amount into the atmosphere. The oven is well sealed off with air curtains at either end. It is fired by Eclipse proportional vari-set mixers and temperature is controlled by Partlo controllers.

The two conveyors leave the dry-off oven at different positions, both immediately rising to near the roof trusses where they pass through automatic lubricators and also through automatic conveyor cleaners. One conveyor then drops down and passes through a 45-ft DeVilbiss water-wash spray booth where parts may be sprayed with any one of 10 different paints pumped through a circulating system from a near-by paint room.

The second conveyor drops down to enter a tandem flowcoater. Parts to be flowcoated pass into a tunnel with an 8-ft approach section, thence through 4 ft of flowcoating, followed by an 8-ft



Schematic diagram of finishing process.

drain and drip-off area. A tandem arrangement of the flowcoater provides for rapid change-over of colors as well as to provide stand-by equipment in the event of a breakdown in the first section.

Paint and thinner for the flowcoater tanks are pumped from an adjacent paint room separate from that provided for the spray booths. The paint is controlled by automatic viscosity control devices.

On leaving the drain and drip-off area in the flowcoater proper, parts continue on to a long drip-off housing and vapor tunnel that provides for approximately 15 minutes of paint flow-off before the parts enter the bake oven. The flowcoater is an important aspect of the over-all system since hand-dipping of some of the parts was previously required. A loss of seven barrels of paint per week was reported under the old method.

Sheet metal parts, including some exterior finishes, can be passed through this flowcoater. A low-pressure system of flowcoating is utilized which assures a lower consumption of solvent and reduces to a bare minimum air foam and bubbles, resulting in a fine, smooth finish.

Under the old method of dipping, a 3000-gal tank would have been required, whereas with the flowcoater, only 150-gal of paint storage is needed. This means a much smaller capital investment, with the added value of being able to have two different colors, if desired.

Parts that have been spray-painted are carried to the end of the booth by the conveyor to an elevated position, and after traveling some distance, they enter the elevated, gas-fired paint-bake oven. At this point the spray paint conveyor and flowcoat conveyor are again adjacent to each other.

The paint-baking oven — double-tunnelled, of A-type construction — is elevated about 20 ft above the floor. Operating temperatures of 450 deg maximum are provided for with an adequate factor of safety in the event that higher baking temperatures should be required for special finishes. The gas oven is 178 ft in over-all length, which allows adequate time for proper curing of the finishes used. Each side of the oven is equipped with its own burners, controls, blowers, and other equipment, so they can be operated at different temperatures where required. This gas oven utilizes direct-fired air heaters with Eclipse burners and Partlo controls.

On leaving the paint-baking oven, the conveyors travel for about 10 minutes to the take-off point. Parts, properly cooled while in transit from the oven, are transferred to seven new parallel, mechanized flat conveyors where they are incorporated in one of the many products manufactured by Utility. Products are fully assembled, tested and packaged on these conveyors.

Special trailers then move the pieces into the warehouse and shipping area, which occupies slightly more than half of Utility's new building. The warehouse formerly was across the street, requiring shuttle service after assembly and before shipping. As many as five 50-ft rail cars can now be spotted and loaded simultaneously either from the warehouse storage areas or directly from the end of the assembly lines. A 190-ft truck dock is also provided at the far end of the new warehouse. ★ ★

Balloon-Type Clamping Device For Cast Iron Main Leaks

Leonard Schneider and **Carl Bowers**

Assistant Superintendent, Gas Distribution

Foreman, Gas Distribution, Iowa Public Service Company, Waterloo, Iowa

Balloon installed and under test.

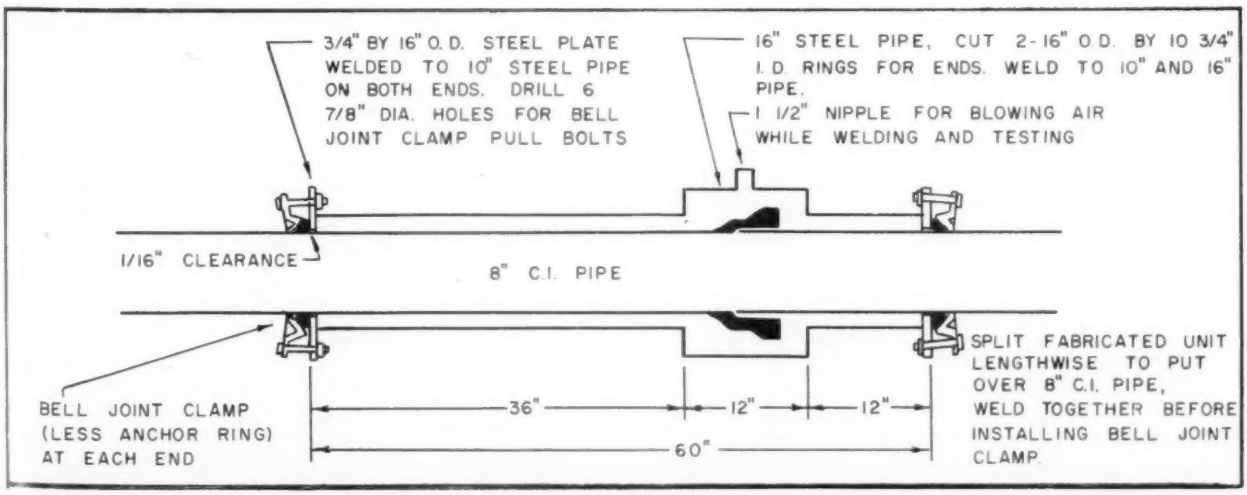
WHEN Iowa Public Service Company, Waterloo, Iowa, changed over to natural gas in 1954, it also had to change the business district, then a low pressure area carrying 6-in. WC, to 4 psi pressure in order to carry the increased load. With the higher pressure, gas came into all the underground pits and ducts in the downtown area. To correct this, all joints of the cast iron pipe, which serve about 80 per cent of the area, had to be clamped.

Working near the north end of the Fifth Street bridge, the crew found an 8-in. cast iron bell joint with several bad pits near the joint that could not be covered by a bell joint clamp. A Skinner bell point clamp was used and the holes in the pipe calked with lead wool, as a temporary measure until a standard split sleeve bell joint repair clamp could be obtained. When this came, it was found inadequate, however, as Gleeco cleaners revealed the fact that the pipe was in worse condition than at first believed. Something had to be improvised, and the crew fabricated a balloon that worked perfectly.

It was found that five feet of the 8-in. cast iron pipe was in bad condition including the bell joint. Measurements showed that 10-in. steel pipe would just fit over the cast iron, with 16-in. steel pipe to go over the bell joint, and using $\frac{5}{8}$-in. plate with gusset-type stiffeners for the ends. Holes, just large enough to slip the balloon over the cast iron pipe, were cut in the end plates. After the fitting was welded, it was cut lengthwise with an acetylene torch; the bottom half was placed in position with the top half set upon it. By using a chain and hydraulic jack, these halves were brought together and tack welded.

A $1\frac{1}{2}$-in. coupling was welded onto the balloon for a vent and during the welding operation an air hose was connected to keep a slow stream of air blowing through, so there would be no danger of a gas leakage buildup. After the sides and ends were welded, the front halves of the two Skinner clamps were installed on the ends. (These are the halves that contain the rubber gaskets.) Holes were cut in the ends plates for the bell joint clamp pull bolts. After the installation was completed, it was given a soap test and it proved to be a good tight job with no leakage.

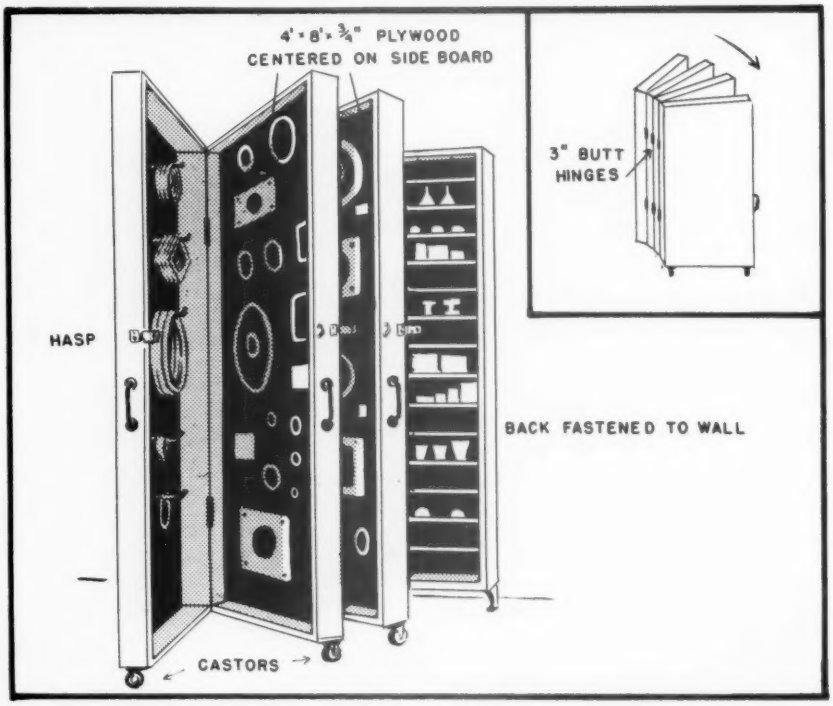
The balloon appears to be a type of sleeve that can be adapted to many uses. The only limitation to this procedure might be the amount of gas that is escaping.


3/4" BY 16" O.D. STEEL PLATE WELDED TO 10" STEEL PIPE ON BOTH ENDS. DRILL 6 7/8" DIA. HOLES FOR BELL JOINT CLAMP PULL BOLTS
16" STEEL PIPE, CUT 2-16" O.D. BY 10 3/4" I.D. RINGS FOR ENDS. WELD TO 10" AND 16" PIPE.
1 1/2" NIPPLE FOR BLOWING AIR WHILE WELDING AND TESTING
1/16" CLEARANCE
8" C.I. PIPE
SPLIT FABRICATED UNIT LENGTHWISE TO PUT OVER 8" C.I. PIPE, WELD TOGETHER BEFORE INSTALLING BELL JOINT CLAMP
BELL JOINT CLAMP (LESS ANCHOR RING) AT EACH END
36"
12"
12"
60"

IDEAS AT WORK

IN THE GAS INDUSTRY

YOUR IDEAS ARE WORTH MONEY! If you have an operating idea or have devised a piece of equipment to do a job easier or cheaper, send it to us with a photo or drawing (we fix up rough sketches)... we will pay $10 for each idea used.

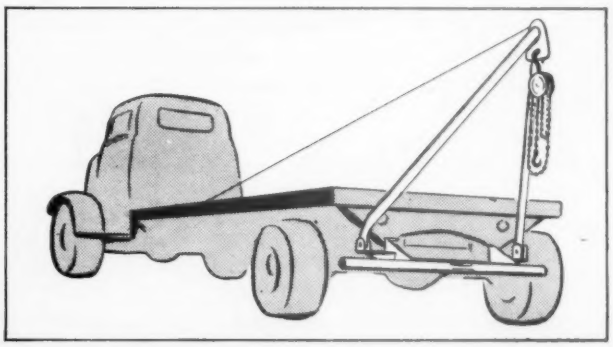


Gasket board closes like a book. A gasket board that opens and closes just like a book was devised by one of the major gas companies to streamline the handling of gaskets in the warehouse.

The "leaves" have a 2-in. by 6-in. wooden frame with a 4-ft by 8-ft sheet of ¾-in. plywood centered in the middle. The stationary frame, which fits against the wall is made of 2-ft by 8-ft boards and a series of small shelves are built inside it.

When not in use the leaves are folded together and latched with hasps. In the closed position, the entire assembly occupies 4-ft by 2-ft of floor space.

Add gin-pole to pick-up or bob-tail maintenance truck. Add two brackets to an extension of the frame of a pick-up or bob-tail maintenance truck and it can be readily converted into a gin-pole truck for hauling valves and fairly heavy equipment. Cut two gin-poles from 2 or 3-inch pipe and flatten and drill one end of each so they will fit into the bracket. Make an "A" of steel rod to fit in the ends of the two poles at the apex and weld a bracket to this "A" to support the coffin hoist as shown. Run a length of wire rope back to the truck frame near the cab, and the hoist is complete.



Glossary of Gas Industry Terms - Ho to In

Hot Spot: An area of a combustion chamber that is at a higher temperature than the surrounding area due to either direct flame impingement or a deposit that prevents the even flow of heat at that point.

Hot Taps: Branch piping connections made to operating pipe lines or mains or other facilities while they are in operation. The connection of the branch piping to the operating line and the tapping of the operating line is done while it is under gas pressure.

Hot Well: A container or tank in which hot water from a condenser accumulates and is drawn off.

Houdry Process: A catalytic cracking process for refining petroleum invented by Eugene J. Houdry.

Hourly Peak: The maximum demand for gas from a transmission or distribution system in any hourly period of time.

House Brand: A product of a company bearing a trademarked name of that company, such as gasoline produced by a particular refining company.

House Governor: A pressure regulator located at customer's meter settings.

House Shut-off: A valve or cock, hand operated, placed in a gas customer's service line, ahead of the meter and used to turn off the gas.

Housing: The enclosing case or cover around a machine or machine part.

Hp: Abbreviation for horsepower; also, sometimes used for high pressure.

Humidification Control: A device for controlling humidifier operation to maintain a desired and preset relative humidity.

Humidifier: A mechanical means of increasing the relative humidity to a preset percentage in a closed chamber by injecting water vapor in air.

Humidistat: The part of a humidification control that measures the relative humidity and opens or closes electrical contacts which actuate the humidifier.

Hydrated Lime: Calcium hydroxide, an ingredient used to thicken the special mud that is used in well-drilling.

Hydraulic: A general term referring to fluids in motion.

Hydraulic Cylinder: A device in which liquid under pressure moves a piston within a cylinder to produce force.

Hydraulic Fluid: A liquid, used in hydraulic systems, that has low pour-point, low viscosity and small variation of viscosity with temperature.

Hydraulic Jack: A jack in which movement is effected by pressure of a liquid.

Hydraulic Main: A collecting main from a coal gas retort. The main is partially filled with water that condenses some of the tars and ammonia from the gas.

Hydraulic Radius: The cross-section area of a fluid flow path divided by the perimeter of the path.

Hydraulic System: A system comprised of a pump, pressure tank, piping, valves and one or more hydraulic cylinders, usually automatically controlled, that serves to operate one or more pieces of mechanical equipment by the pump pressure acting through the hydraulic cylinders to move the operating mechanism of the mechanical equipment.

Hydrocarbon: A chemical compound composed soley of carbon and hydrogen. The compounds having a small number of carbon and hydrogen atoms in their molecule are usually gaseous; those with a larger number of atoms are liquid and the compounds with the largest number of atoms are solid.

Hydrocol Process: A catalytic process for production of gasoline and other chemical products from natural gas, crude oil, fuel oil or coal.

Hydrogen: A colorless, odorless, highly inflammable, gaseous element (H) used in hydrogenation of petroleum and for producing ammonia. Also, an important constituent of manufactured gas.

Hydrogen Sulfide: A compound of sulfur and hydrogen, gaseous in its natural state. It is found in manufactured gas made from coals or oils containing sulfur, and must be removed. It is also found to some extent in some natural gas and again must be removed. It is characterized by having the odor of rotten eggs.

Hydrogenation: A refining process in which oil is decomposed at high temperature in the presence of hydrogen and a catalyst to produce gasoline fractions from the oil.

Hydrograph: A clock-driven device that continuously records the humidity of the atmosphere around it.

Hydrometer: An instrument for determining the specific gravity of a liquid. When floated in the liquid, the gravity is read directly by a scale marked on the stem of the instrument, at the level of the liquid surface.

Hydrons: Containing water in chemical combination.

Hydro-oxy Oil Gas: A process by which the illuminating value of an oil gas is increased by the addition of oxygen.

Hydrostatic Squeeze Test: A test of equipment in which the item of equipment is filled with liquid under suitable pressure and then shut in. If there is no loss of pressure during a stated period, the system is free of leaks.

Hygrometry: The measurement of the percentage of moisture in air, from which the relative humidity may be determined.

I

Ideal Gas: A gas that conforms in behavior to the gas laws.

Ignition: Starting combustion.

Ignition Arch: A refractory brick arch that stores heat to ignite any combustible gas flowing into the carburetor of a carbureted water gas set, during the preparation or blow period of operation.

Ignition Temperature: The temperature at which a combustible substance will start to burn and continue burning with a normal supply of air.

Ignition Velocity: When the rate of flame propagation of a given gas-air mixture is determined by burning the mixture in a one-inch tube, the ignition velocity is approximately one-half the rate of flame propagation. It equals the rate of flame propagation as determined by the inner cone method.

IHP: Indicated horsepower.

Illuminants: The group of hydrocarbons in a manufactured gas, such as ethylene and benzene, that burn with a luminous flame.

Illuminating Gas: Natural or manufactured gas burned in a jet with a deficiency of primary air to produce a luminous flame for lighting.

Immiscible: Non-mixable liquids, such as oil and water.

Impact Head: The operating pressure of a fan or blower and equal to the sum of the velocity head and static pressure of the gas discharged.

Impeller: The rotating part of a blower or centrifugal pump that forces the fluid through the housing of the equipment. Also, the blade assembly of a fan.

Inactive Black: Carbon black having a low absorptive capacity.

Incandescence: That condition of a heated substance which results in the radiation of heat and light.

Incandescent Mantle: The light producing element in a lamp in which a flame heats a chemically-impregnated knitted mantle or bag, mounted over the burner, to incandescence.

Inch of Mercury: A unit of pressure in which one pound per square inch equals 2.036009 inches of mercury column.

Inch of water: A unit of pressure in which one pound per square inch equals 27.68049 inches of water at 4 C.

Inclined Retort: A coal gas generating retort with the long axis set at an angle from the horizontal, but not vertical.

Inclinometer: In drilling of gas and oil wells, an instrument for measuring the deviation of the hole from the vertical.

Incomplete Combustion: Burning with an insufficient supply of oxygen so that the burning substance is only partially consumed and could be burned further with additional air supply.

Independent: Applied to the oil industry, any small company, group or individual, operating in a single branch of the industry.

Index: A general term for a measure; also applied to the mechanism, composed of gears, dials and dial face, that indicate the quantity of gas passing through a meter.

Index Books: Another term for meter books.

Indicated Horsepower: In engines, the total horsepower development.

Indicator: An instrument for producing a diagram of the pressure-volume or the pressure changes within the cylinder of an engine or a compressor during the working stroke.

Indicator Card: The pressure volume graph or diagram traced by an engine indicator that shows the pressure distribution within the cylinder and that affords a means of computing the horsepower developed within the cylinder.

Indicator Diagram: A graphical representation of the volume and the changes in pressures, automatically drawn by an indicator pencil upon a special paper, or card.

Indicator Gage: Gages are used to indicate pressures of all kinds above and below the atmospheric pressure. Those below atmospheric pressures are generally called vacuum gages. Contrasted with recording gages, that record with a penpoint the changes of pressure upon a chart.

Indirect Firing: A method of heating a coke oven or coal gas retort by drawing produced gas mixed with air into flues and burning it there so that the heat of combustion is supplied directly to the walls of the ovens or retorts.

Induced Draft: Air draft through a boiler or furnace caused by a fan, set in the flue of the equipment, that sucks the air through the combustion chamber and sucks the flue gases out.

Industrial Service: Gas service to customers who create a product or modify raw or unfinished materials into another product, or who extract raw materials from the earth.

Inert: Not acted upon chemically by the surrounding environment. Nitrogen is an inert constituent of fuel gases; it dilutes the gas and does not burn itself.

Inflammability Limits: The maximum and minimum concentrations of fuel in a fuel-air mixture at which the mixture will burn.

Inflammable: Easy to set on fire; as, an inflammable gas.

Inflammable Solvent: A solvent having a flash point less than 100 F.

INGAA: Abbreviation for Independent Natural Gas Association of America, an organization of producers and transporters of natural gas.

Inhibitor: Any substance or material that retards or stops a chemical reaction.

Initial Boiling Point: The temperature of the vapor in a batch distillation column when the first drop of liquid falls from the condenser.

Injected Gas: Gas returned to a producing sand for storage or for maintenance of oil reservoir pressure.

Injection Well: Same as input well.

Injector Tube: A tube with a venturi throat that leads from the primary air port and gas orifice of a gas burner to mixing chamber and burner ports. As the gas passes from the gas orifice through the tube, it draws air through the primary air port into the mixing chamber, after which the mixture is burned at the burner ports.

Input Power: The amount of power or energy being used or entering a machine.

Input Rating: The maximum rate that fuel can be fed to a burner.

Input Well: A well used to inject gas into a producing sand for storage or for oil reservoir pressure maintenance.

Inorganic Theory: A somewhat discredited theory that holds that oil and gas are a product of the reaction of heavy metal carbides with subterranean water, rather than the decomposition of organic, animal or vegetable matter.

Inspirator: Another term for injector tube.

Inspirator Mixer: A mechanical device in which primary air is drawn by a jet of gas into a mixing chamber at a rate proportional to the gas flow rate.

Institute of Gas Technology: A Chicago educational institution, supported by the gas utilities and gas appliance manufacturers, dedicated to basic and applied research in the gas industry and graduate training in gas technology.

Part 6 of Gas Fundamentals will appear in the next issue.

New Perpetual Building in Bethesda, Maryland, is tallest commercial building in the suburban Washington, D. C., community. Note the penthouse, which houses the building's heating plant, air conditioning machinery, and domestic hot water heaters.

Typical of New Trend in Commercial Building Installations

Roof-Top Gas-Fired Boilers

THE trend to boiler-on-roof installations for commercial structures is well demonstrated by the penthouse heating plant atop Perpetual Building & Loan Association's relatively new Bethesda, Maryland, headquarters.

Located some 80 feet above the sidewalks are two completely automatic gas-fired boilers that have completed a full season of service. Circulators move hot water created by these National-U. S. Radiator Corporation gas boilers throughout a three-zone heating system. Also installed in this rooftop addition are the air conditioning machinery and domestic hot water heaters.

The first layout called for a combination steam and hot water job. As plans progressed, it was found that condensate return for the steam section would probably be difficult to weave between required structural piers and beams.

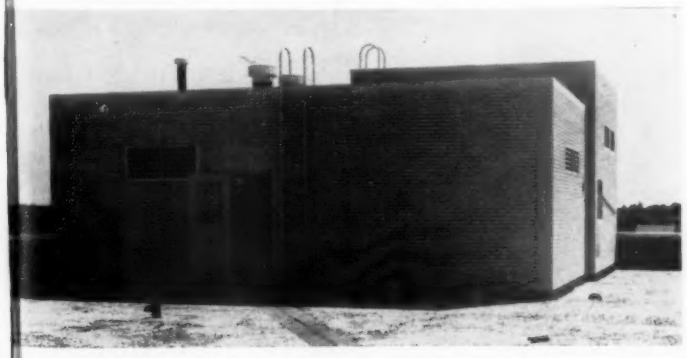
Steam was abandoned in favor of all-water. There then arose the problem of installing a special boiler to efficiently and properly handle the high static pressure of water in this multi-story building.

The building architect then proposed the removal of the source of building heat to the roof. This would allow using standard cast iron gas boilers, designed and constructed for a working pressure of 30 psi. The proposal was adopted. The 18 cast iron sections in the two 9-W-66 boilers were individually hoisted to the roof and the sections quickly assembled into two compact gas boilers that still allowed ample space in the small penthouse.

Natural gas supplied by The Washington Gas Light Company was piped to the boilers. Automatic water feeders were installed. Piping was run from the flues to vents in the penthouse roof — a costly chimney, vital for basement installation, was thus eliminated.

Perpetual Building & Loan Association occupies the basement, first floor and mezzanine of the new building. Its $85,000 heating system is composed of three zones. The basement is one zone, the first three floors are another zone, and the third zone covers the upper floors. Heat distribution mediums include unit ventilators in the entrance halls, convectors in the stair wells and banking areas, and baseboard radiation throughout the rental floors.

The gas boilers, installed early in 1955, have not yet required a call-back due to heating plant difficulties. A building management official has said that the heating plant is trouble-free. While natural gas costs are a little higher than competitive fuels, the new building is judged still ahead because of the completely automatic functioning of the boilers, the cleanliness, safety, and labor saving characteristics generally associated with gas fired heating systems. * * *



Penthouse on the roof. By venting the two boilers through the penthouse roof, a costly chimney was unnecessary. (Right) The gas fired boilers form the heart of the $85,000 building heating system.

In Pasco, Washington, too— Clevelands® dig the gas lines

DISTRIBUTION SYSTEMS in Pasco and Kenewick, Washington, are being constructed for Cascade Natural Gas Company by A. J. Curtis Construction Company of Casper, Wyoming. Even in alleys and similar narrow rights of way, such as the 4-inch main installation shown, Curtis, cashing in on the compactness and maneuverability of his Cleveland trenchers, is averaging 1,650 feet of trench per 6-hour day.

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FPC REPORT

Applications by five companies to construct an aggregate of 1323 miles of pipe line, install 155,000 in compressor horsepower, plus other facilities, at a cost of over $190,000,000, have been consolidated by the FPC for hearing, commencing October 2. Companies affected include Natural Gas Pipeline Company of America, Texas Illinois Natural Gas Pipeline Company, Chicago District Pipeline Company, Pacific Northwest Pipeline Corporation, and Colorado Interstate Gas Company.

Four More Companies have been exempted from federal regulation by the FPC under the Hinshaw Amendment. Latest firms on the roster include Northern Illinois Gas Company, Aurora, Illinois; Mississippi Valley Gas Company, Jackson, Mississippi; Slippery Rock Heat and Light Company, Emlenton, Pennsylvania, and Citizens Natural Gas Company, Boulder City, Nevada.

Owens-Corning Fiberglas Corporation will buy 1,500,000 cu ft daily of natural gas on an interruptible basis at its Anderson, South Carolina, plant from Transcontinental Gas Pipe Line, under terms of a decision filed by an FPC presiding examiner granting a certificate of public convenience and necessity for the gas sale.

Consolidated Gas Utilities Corporation, Oklahoma City, Oklahoma, has withdrawn a proposed $600,000 annual wholesale rate increase that had been previously suspended by the FPC. The increase, which would have affected Cities Service Gas Company, was based primarily on a proposed increase by Cities Service, which buys gas from Consolidated and in turn, sells it back to Consolidated at another point on its system.

A third delivery point for natural gas to the Chicago area is proposed by Chicago District Pipeline Company in an application to the FPC. New facilities, costing $4,600,000 and consisting of 14 miles of 36-in. delivery line, would add a delivery terminal to the northern city limits of Chicago. Chicago District, a subsidiary of Peoples Light and Coke Company, provides transportation of gas from Natural Gas Pipeline Company and Texas Illinois Gas Pipeline Company lines to its customer companies, Peoples, Northern Illinois Gas, and Northern Indiana Public Service.

Texas Illinois, in turn, is proposing some 38 miles of 36-in. loop line to deliver increased volumes to Chicago District in a separate application.

CALENDAR OF THE GAS INDUSTRY

SEPTEMBER 1956

10-11 Independent Natural Gas Association of America, San Antonio, Texas.
11 NEGA safety conference, Hotel Statler, Boston.
11-13 PCGA annual meeting, Hotel del Coronado, Coronado, California.
12-14 MidWest Gas Association, gas school and conference, Iowa State College, Ames, Iowa.
13-14 AGA-EEI accounting section organizational meeting, Edgewater Beach Hotel, Chicago, Illinois.
14 NEGA CHI division, Wachusett Country Club, Wachusett, Massachusetts.
14 AGA personnel committee, headquarters.
14-15 Maryland Utilities Association, 32nd fall conference, The Cavalier Hotel, Virginia Beach, Virginia.
17 AGA accident prevention committee, Shirley-Savoy Hotel, Denver, Colorado.
17-20 American Transit Association, Jefferson Hotel, St. Louis, Missouri.
18-19 AGA accident prevention conference, Shirley-Savoy Hotel, Denver, Colorado.
19-21 Southeastern Gas Association, Hotel Sir Walter, Raleigh, North Carolina.
19-21 American Trade Association, Executives, annual meeting, Plaza Hotel, New York City.
30-Oct. 3 Controllers Institute of America, Waldorf Astoria, New York City.

OCTOBER 1956

4 NEGA, appliance servicing conference, Hotel Statler, Boston.
8-12 National Metal Exposition, Cleveland, Ohio, (AGA will exhibit.)
9-10 Gas Measurement Institute, 4-H Building, Liberal, Kansas.
9-10 AGA Industrial and Commercial Gas Section, The Hollenden, Cleveland, Ohio.
9-12 The American Dietetic Association, Milwaukee, Wisconsin.
15-17 AGA annual convention, Atlantic City, New Jersey.
15-19 National Metal Show, Cleveland, Ohio (AGA exhibit).
17-19 Wisconsin Utilities Association, electric and gas section convention, Schroeder Hotel, Milwaukee.
22-24 American Standards Association, Hotel Roosevelt, New York City.
22-26 National Safety Council, Chicago.
31 NEGA operating division, Hotel Statler, Hartford.

NOVEMBER 1956

1-2 American Home Laundry Manufacturers Association, Conrad Hilton Hotel, Chicago.
12-15 American Petroleum Institute, Conrad Hilton Hotel, Chicago.
12-16 National Electrical Manufacturers Association, Traymore Hotel, Atlantic City, New Jersey.
12-16 National Hotel Exposition, New York Coliseum, New York City.
14 Joint committee on dealer cooperation (AGA, GAMA, FSEI), Hotel St. Moritz, New York City.
25-30 The American Society of Mechanical Engineers, Statler Hotel, New York City.
26-28 SGA advisory council and management conference, Point Clear, Alabama.

JANUARY 1957

4- 5 American Home Laundry Manufacturers Association, annual convention, Chicago.
23 NEGA operating division, Hotel Statler, Boston, Massachusetts.
28-29 Industrial Heating Equipment Association, Washington, D. C.

FEBRUARY 1957

3-5 Public Utility Buyers' Group, National Association of Purchasing Agents, The Brown Hotel, Louisville, Kentucky.
4-8 Western winter radio-television and appliance market, Western Merchandise Mart, San Francisco.
25-Mar. 1 American Society of Heating and Air Conditioning Engineers, Chicago.

MARCH 1957

11-15 National Association of Corrosion Engineers, Kiel Auditorium, St. Louis, Missouri.
18-20 Mid-West Gas Association, Hotel Nicollet, Minneapolis, Minnesota.
21-22 NEGA annual meeting, Hotel Statler, Boston.
25-27 Mid-West Gas Association, Hotel Nicollet, Minneapolis, Minnesota.
28-29 Oklahoma Utilities Association, annual convention, Tulsa, Oklahoma.

APRIL 1957

8-10 National conference of electric and gas utility accountants, Sheraton-Park Hotel, Washington, D. C.
8-10 GAMA annual meeting, The Greenbrier, White Sulphur Springs, West Virginia.
8-11 AGA distribution, motor vehicles and corrosion conference, Rice Hotel, Houston, Texas.
16-18 AGA sales conference on industrial and commercial gas, Jung Hotel, New Orleans.
16-19 University of Oklahoma Gas Measurement Short Course, Norman, Oklahoma.
25-26 Indiana Gas Association, annual meeting, French Lick-Sheraton Hotel, French Lick, Indiana.
29-May 1 Southern Gas Association, New Orleans, Louisiana.

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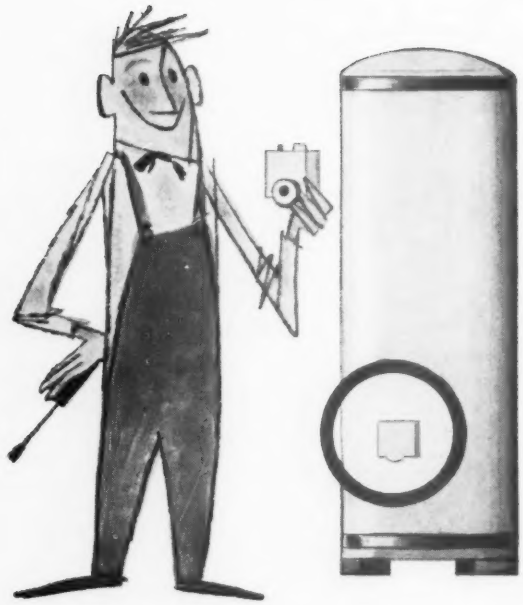

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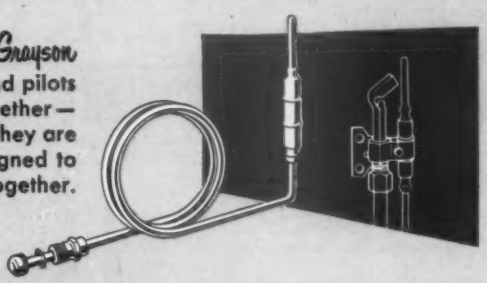
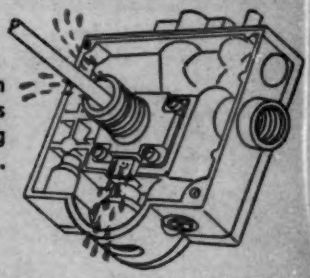


Air-Gap Construction Throughout Prevents Water Entering Gas Lines.



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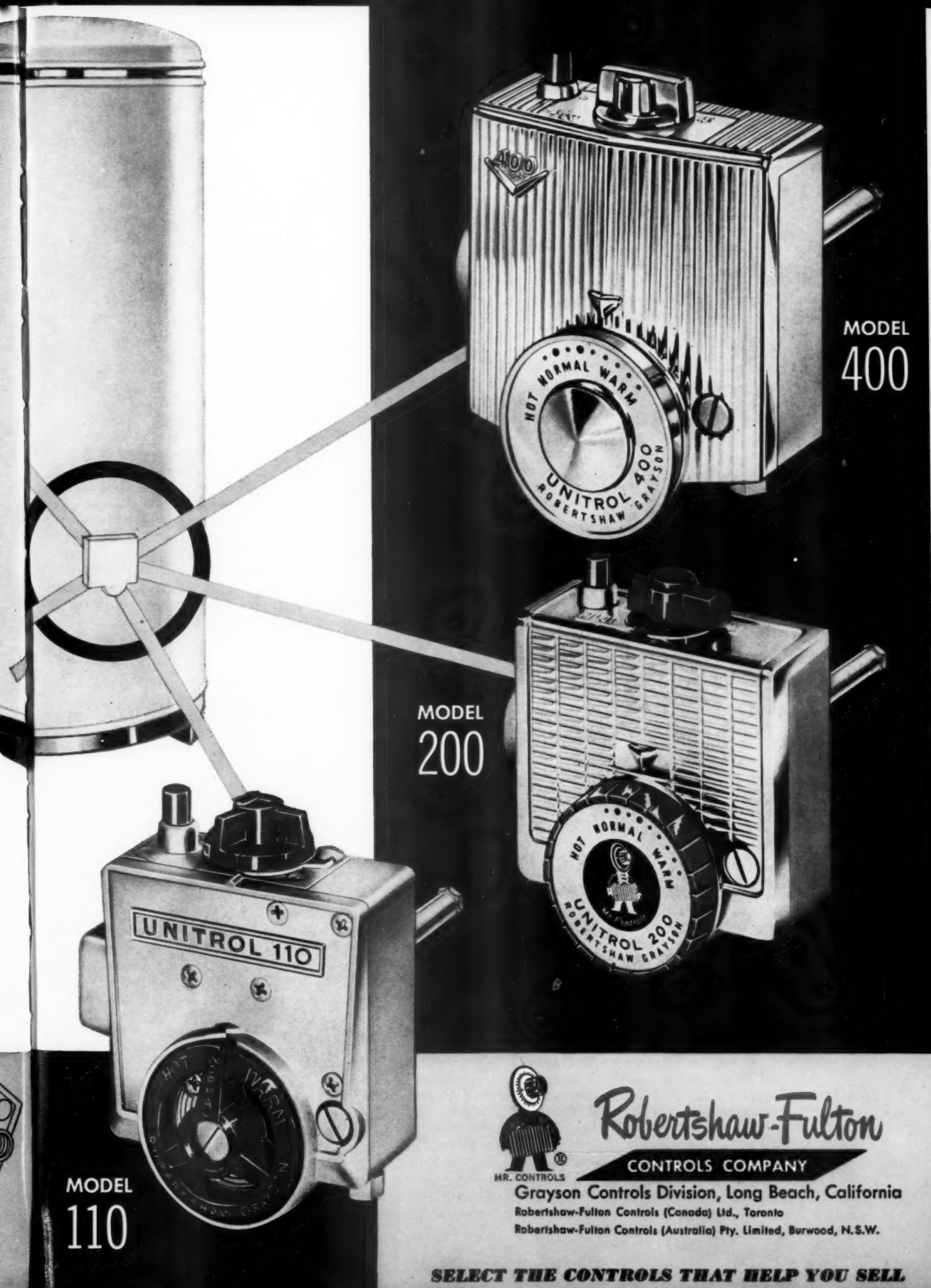

MODEL 400

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GAMA Reports Canadian 10-Year Forecast Looks Good

Canada's natural gas industry not only will meet more than 20 per cent of the Dominion's fuel requirements in the next 10 years, but also will find American markets, particularly in the Northwest, Middle West, and Great Lakes area, and help the continent as a whole to expand its fuel reserves.

This forecast was made by H. Leigh Whitelaw, executive vice president of the Gas Appliance Manufacturers Association, in an address prepared by W. F. Rockwell, Jr., GAMA president, at a meeting of the Canadian Gas Association at Murray Bay, Quebec.

Recalling that in the early 1900's a prominent Australian official had visualized the 20th century as belonging to the United States," Whitelaw said "the continuing upcurve of your technological accomplishment indicates that the 21st century will be the Canadian Century."

"If this eventuates, there is little doubt that the Canadian gas industry will have been an important factor," Whitelaw said.

The GAMA official pointed out that Alberta gas reserves have more than tripled in the past five years, and estimated that the Province will account for a reserve of 60 trillion cubic feet by 1980. This, he said, would outstrip the rate for all areas in the U. S. combined during a comparable period from 1925 to 1955.

The Canadian industry, he added, will benefit from the early experience of the U. S. that once allowed unmeasured volumes of gas to burn up at the source because "markets were not ready, long distance high-pressure pipe lines had not been developed, and the important technology of recycling gas to the producing levels as an oil drive had not been achieved."

Now, he said, gas is a decisive modernization factor in 36,000,000 American homes and a vital tool in more than 26,000 different industrial processes.

Canada's potential as a source of natural gas, with exploration proceeding in Ontario, New Brunswick, Nova Scotia and elsewhere, should enable it to rival, if not eclipse, America's gas industry record, Whitelaw said. At present, he added, American gas is being delivered to Ontario. Future exchange between the two countries, he said, will enable both to make a sizeable and significant contribution to balanced trade.

Stand-By Plant Contracts Awarded for Pacific Northwest

Contracts to design and install two LPG stand-by plants for Northwestern cities have recently been awarded to American Liquid Gas Corporation. One contract is with Washington Natural Gas Company, Seattle, for a plant to serve Olympia and Tacoma. The second contract calls for a plant at Burnaby, British Columbia, for British Columbia Electric Company, Ltd., of Vancouver, B. C. The two plants will have a combined capacity of 200,000 cu ft per hour of propane-air mix and a total storage capacity of 300,000 gal of propane.

The Washington Natural Gas contract calls for design and construction of a plant to deliver 100,000 cu ft of propane-air mix per hour into its distribution system. This plant, to be used primarily for peak-load shaving, will have four 30,000-gal propane storage tanks.

Equipment for this installation will be designed to blend LPG with air and combine with natural gas in the company's system at 60 psi. A specially designed hot water type vaporizer will deliver 1200 gal per hour. Construction is under way and is scheduled to be completed by October 15th.

For British Columbia Electric Company, Ltd., Algas will supply automatic mixing equipment for a propane-air plant that will be a part of the peak-load shaving system. This plant will deliver 100,000 cu ft of propane-air gas per hour into the distribution system. Pressure will be set at 100 lb.

The initial plant will have a total storage capacity of 180,000 gal, made up of six 30,000-gal tanks. Plans for future expansion provide for an additional 24 30,000-gal tanks.

Relocation Site Selected by National Bureau of Standards

The National Bureau of Standards has selected a tract of approximately 550 acres of land near Gaithersburg, Maryland, for the relocation of the Washington laboratories.

Congress has appropriated funds for site acquisition and the transfer of operations to the new location is expected to be completed in about five years.

"Eternal Flame" — Highlighting the importance of natural gas in the community's development, this "Eternal Flame" monument was used by Connellsville, Pennsylvania, to symbolize its Sesquicentennial celebration. The burner atop the 16-foot high monument was lit at midnight ceremony in August with fire brought from the Eternal Peace Monument at Gettysburg, Pennsylvania. The monument was sponsored by Manufacturers Light and Heat Company, a Columbia Gas System affiliate.

Gas A/C World Premiere Set for Dallas in September

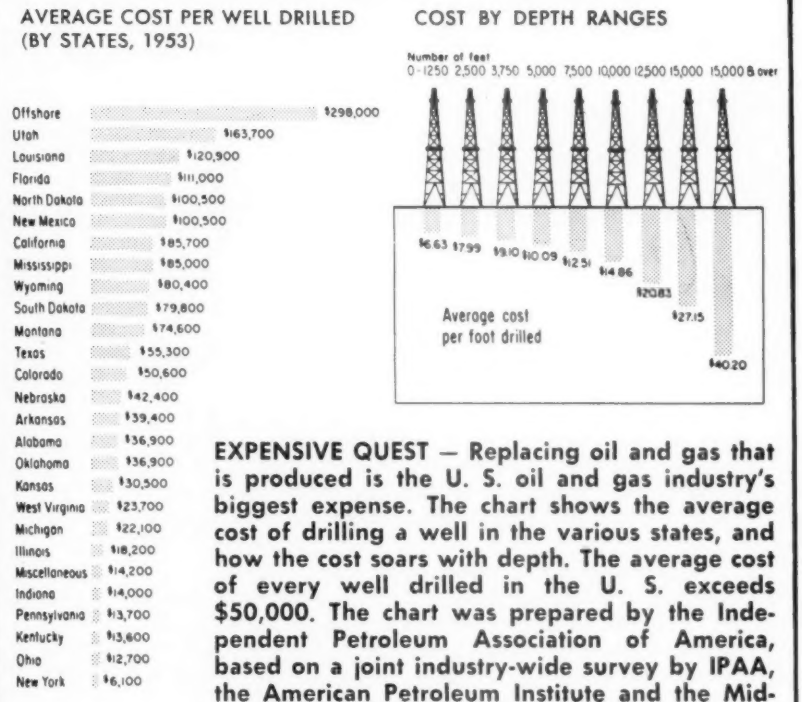
A new type residential gas air conditioning unit produced by the Coleman Company, Inc. of Wichita, Kansas, will be given a world premiere in Dallas, Texas, during the Parade of Homes, September 14 through 23.

Driven by a natural gas-fueled engine, the new conditioned reduces operating costs at least 50 per cent under that of comparable equipment, according to Leland G. Lee, Jr., Dallas builder and parade chairman.

Mass production on the new unit is slated to begin in 1957.

A "use-the-user" program is being utilized by Servel, Inc., to help increase refrigerator sales by providing retail salesmen with names of prospects. Based on the prime source of leads to prospects, the Servel user, the plan is built around a two-color mailing folder, that is headlined "We'll Give You $5 Just For Doing a Good Turn." It provides Servel owners with a postage-paid return card on which they can list the names of friends or neighbors who might be interested in a new Servel refrigerator. For every lead supplied by an owner that results in a sale within 30 days, the Servel owner is paid five silver dollars.

COST OF OIL & GAS WELL DRILLING, BY STATES



EXPENSIVE QUEST — Replacing oil and gas that is produced is the U. S. oil and gas industry's biggest expense. The chart shows the average cost of drilling a well in the various states, and how the cost soars with depth. The average cost of every well drilled in the U. S. exceeds $50,000. The chart was prepared by the Independent Petroleum Association of America, based on a joint industry-wide survey by IPAA, the American Petroleum Institute and the Mid-Continent Oil & Gas Assn.

Industry News Notes

More than 5000 metal working companies in the U. S. and Canada have received floor plans for the 10th Western Metal Congress and Exposition to be held in Los Angeles March 25 through 29, 1957. Space selections will be in mid-September by the assignment committee. Show sponsor will be the American Society for Metals with the Los Angeles Chapter acting as local hosts.

The Illinois Commerce Commission has approved Northern Illinois Gas Company's plan to construct an underground propane storage cavern on Elmhurst Road in Elk Grove township about two miles northwest of O'Hare International Airport. Contracts will be let soon for the construction of the cavern which will be mined out of rock about 280 ft below the surface. Mining the rock for the cavern is planned for this winter with completion of the operation sometime next year.

Work has begun on an $800,000 natural gas pipe line that Pacific Gas and Electric Company will use to supply fuel to Permanente Cement Company's Cushenberry Plant at Lucerne Valley, 34 miles south of Daggett, California. The steel line will tap PG&E's main line east of Daggett and have a transmission capacity of 1,000,000 cu ft per hour. The first 22.7 miles will be of 10-in. pipe and the remaining 11.3 of 8-in.

Gas utility and pipe line industry sales amounted to 4886 million therms in June — an increase of 10.0 per cent over June, 1955. Sale of gas to industrial users is largely responsible for the increase, according to AGA reports. Natural gas sales by utilities and pipe lines to ultimate consumers in June were 4649 million therms — up 10.2 per cent over a year ago. Total manufactured and mixed gas sales increased 6.3 per cent for a total of 237.3 million therms. Gas aggregated sales totaling 70,098 million therms represented a 9.0 per cent increase for the 12 months ending in June.

An increase averaging $8.50 per ton for carbon and alloy steel has been put into effect by United States Steel Corporation and its general operating divisions, American Steel and Wire, National Tube, and Tennessee Coal & Iron Division. This increase, amounting to less than ½ cent per pound, is attributed by U. S. Steel officials, to the new labor agreement that has been concluded with the United Steelworkers in the form of higher employment costs.

Metal Show To Feature AGA Gas Exhibit

During the week of October 8, when the 1956 National Metal Congress and Exposition is held in Cleveland's Public Auditorium, AGA's Industrial and Commercial Gas Section will sponsor one of the largest single exhibits in the show.

Under the Blue Flame Banner the exhibits will stress the uses of gas in industry for hot forming, heat treating, prepared atmospheres, metal melting and finishing. Over 50,000 visitors are expected to attend the meetings and exhibits.

Arizona Public Service Installs Electronic Computer

Arizona Public Service is the first company in the state to install an electronic computer. Ground breaking ceremonies were held in July and the building is scheduled for completion in December. Delivery of the Univac is set for October.

Initially, Public Service will use the Univac in five fields. These are: revenue accounting, vehicle accounting, plant accounting, stores accounting, and payroll.

A unique feature in the wing of the new structure that will house the computer will be a wall of glass from floor to ceiling along one side of the Univac room. This area will be used as a visitors' viewing gallery. After completion of the installation daily tours will be given to the public.

AGA Issues Data on Flow of Natural Gas

American Gas Association has announced the publication of Bureau of Mines Monograph 9, "Flow of Natural Gas Through Experimental Pipelines and Transmission Lines" by R. V. Smith, J. S. Miller, and J. W. Ferguson. This monograph presents the results of work done by the Division of Petroleum, Bureau of Mines, United States Department of the Interior, in cooperation with the Pipeline Research Committee of the AGA under its Promotion, Advertising and Research Plan and with the State of Oklahoma.

Work conducted under this cooperative study on the flow of natural gas in horizontal pipes is included as well as the results of experimental flow tests conducted at Cliffside, Texas, and Goleta, California, on 2, 4, 6, and 8-in. seamless pipe, 8-in. welded pipe and specially prepared 3-in. superfinish stainless steel pipe. Reynolds numbers for the determinations of transmission factors ranged from a low of 49,900 in the 2-in. seamless pipe line to a high of 36,000,000 in the superfinished pipe line.

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AGA To Feature Gas A/C at Convention

Are your plans made for October 15, 16, and 17? The 39th annual convention of the American Gas Association will convene in Atlantic City on those days and nationally-known speakers will address delegates during the three day meeting.

A highlight of the convention will be the special luncheon and business meeting devoted to a presentation of the progress being made in the development of gas all-year air conditioning equipment. The meeting will be held in the American Room of the Hotel Traymore, October 17.

Several speakers from this field will discuss market potentials and competitive activities. Delegates will also hear a thorough and comprehensive review of the research and development activities of seven major manufacturers currently producing gas all-year air conditioning equipment.

General Sessions will be held in the Ballroom of the Atlantic City Auditorium at 10:00 o'clock each morning of the convention. The first General Session on Monday will open with a surprise ceremony. After a report by Vincent T. Miles, treasurer of the AGA, and treasurer, Long Island Lighting Company, the President's Report will be given by Dean H. Mitchell, president of AGA and president, Northern Indiana Public Service Company. His report will present a clear picture of the gas industry as it stands today.

An expert's view on federal regulation will be offered by the Honorable Jerome K. Kuykendall, chairman of the Federal Power Commission. Producers, transporters, and distributors will be interested in the immediate and long-range views expressed by the chairman of the FPC.

W. F. Rockwell, Jr., president, Rockwell Manufacturing Company, and president, Gas Appliance Manufacturers Association, will address the delegates on Tuesday morning, after the presentation of awards by AGA president Dean Mitchell. He will discuss "A Coordinated Program of Progress," on an industry-wide basis.

"America's Role in a Changing World," will be described by Herman W. Steinkraus, president, Bridgeport Brass Company, and past president, Chamber of Commerce of the United States.

An address, "Unity in the Natural Gas Industry," by J. J. Hedrick, president, Natural Gas Pipeline Company of America, and president-elect of the Independent Natural Gas Association of America, will open the third General Session.

Judson S. Sayre, president, Norge Division, Borg-Warner Corporation, Chicago, will talk on selling and salesmanship.

The final speaker on Wednesday will be Martin R.Gainsbrugh, chief economist, National Industrial Conference Board. He will discuss the current business outlook.

Tuesday is Home Service Day at the convention. "Business for Breakfast" will be introduced by Mrs. Eleanor V. Wiese, Public Service Electric and Gas Company, chairman of the AGA Home Service Committee. The Home Service Round Table meeting will be held Tuesday afternoon.

Plans of the entertainment committee include the president's reception, entertainment and dance Monday evening; luncheon-style show for the ladies Tuesday afternoon, and a program of excellent entertainment on Tuesday evening.

Lab Testing Pioneer Honored by Gas Industry

Raymond Mower Connor, who retired in July after 41 years in the gas industry, was honored recently at a testimonial dinner given jointly by the American Gas Association and the Gas Appliance and the Gas Appliance Manufacturers Association.

R. M. Conner

Conner is generally regarded as having done more than any other individual to establish the present system of testing and standards in the gas appliance field. Chester S. Stackpole, managing director of AGA, and H. Leigh Whitelaw, executive vice president of GAMA, termed his pioneering an essential factor in the vast expansion of gas utility operations and appliance manufacturing.

Since 1947 Conner has been a consultant at the AGA laboratories in Cleveland. Prior to that time he directed the laboratories from the time of their establishment in 1925 until 1947.

Awards were presented to Conner by AGA and GAMA, and also on behalf of the Pacific Coast Association, which he served before joining the national association.

Men At Work IN THE GAS INDUSTRY

● **Robert S. Jefferies** has been promoted to the newly-created position of manager of gas storage for New York State Natural Gas Corporation. Formerly chief engineer for the firm, he will be responsible for matters pertaining to storage, planning, construction, and operations. He will continue as supervisor of compressor station operations.

R. S. Jefferies

S. F. Silloway

● **Stuart F. Silloway** has been named president of Pacific Northwest Pipeline Corporation of Houston, Texas. **C. R. Williams,** who has directed the operations of Pacific since 1951, has been appointed vice chairman of the Board of Directors. Silloway was formerly vice president for finance of The Mutual Life Insurance Company of New York and has participated in financing of many extensive oil and gas projects. As president of Pacific, Silloway will also be a director of both the pipe line company and its subsidiary, Northwest Production Corporation. He will make his headquarters at Salt Lake City.

Rolland Wages

M. A. Wilson Jr.

● **Rolland Wages** has been named to fill a newly created position of traffic supervisor in the purchasing department of Northern Natural Gas Company. **Marvin A. Wilson Jr.,** has joined Northern Natural as assistant to the manager of gas purchases, **G. E. Stahl.**

● **Lawrence E. Ostrye,** assistant to the president and personnel director of The Peoples Natural Gas Company has retired. He is a veteran of close to 45 years' service with Peoples Gas and Standard Oil Company of New Jersey subsidiaries. **Charles V. Hoey** has been promoted from assistant personnel director to personnel director.

● **Raymond Mower Conner,** consultant for the American Gas Association Laboratories, retired in July, after 41 years of distinguished service to the American gas industry. After more than 22 years as Director of the AGA Laboratories, and as Secretary of the Approval Requirements Committee, illness in 1947 required him to relinquish active participation, but he has continued his services as the Laboratories' Consultant until his retirement.

● **S. A. B. Kembry** has been appointed superintendent of electrical and gas inspection services for the Province of Alberta. He was formerly chief electrical inspector. **I. G. Pinlay,** who was formerly assistant chief electrical inspector, will become chief electrical inspector. Kembry has been chief inspector of the electrical protection branch since 1942, and with the Alberta government since 1925. In his new capacity he will assume new duties under the Gas Protection Act, passed last year.

● **E. Maurice Myers,** assistant to **C. B. Day,** vice president and general manager, has been named to direct cathodic protection work of Consolidated Gas Utility Corporation, Oklahoma City, Oklahoma. **T. L. Canfield,** Lawton, chief corrosion engineer, has resigned to accept other employment. **Truel Adams,** assistant to Canfield in the Lawton office, will move to the Oklahoma City office in the capacity of corrosion supervisor.

● **Allen D. Schrodt,** formerly sales coordinator, Southern Union Gas Company, Dallas, Texas, has been named director of the Promotion, Advertising and Research (PAR) Program of the American Gas Association. **Otto E. Zwanzig,** former director of PAR resigned to become general sales manager of the British Columbia Electric Company, Ltd., in Vancouver, B. C.

A. D. Schrodt

T. A. Wilson

● **T. A. Wilson,** assistant manager of the Southern Union Gas Company's northwest New Mexico district, received a 25-year diamond-set lapel pin in July.

W. G. Horsley

R. W. Ramsdell

J. H. Carson

A. H. Forbes

● Three promotions and one addition among the top executives have been announced by the East Ohio Gas Company; **G. W. Horsley,** vice president since 1950, is now senior vice president; **R. W. Ramsdell,** former vice president, is now the executive vice president of East Ohio; **John H. Carson,** also a former vice president, is now vice president and general manager. **A. H. Forbes** has returned to East Ohio as a vice president. He has been a vice president of another Consolidated company, the New York State Natural Gas Corporation. **Dr. F. E. Vandaveer,** director of the East Ohio laboratories in Cleveland, has become associate director of research for the Consolidated Natural Gas Company system. He will continue his East Ohio position and responsibility.

● **Thomas C. Bain,** former Lone Star Gas Company industrial engineer, has returned to the company after five years in Caracas, Venezuela, where he was chief promotion engineer for the Venezuelan Atlantic Transmission Corporation. He will fill a newly created position of industrial air-conditioning specialist in Lone Star's sales and promotion department and will be headquartered in Dallas.

● **Donald W. Weir** has been named assistant to the president of Arkansas Louisiana Gas Company, a new position in the company. He will be in charge of personnel, employee welfare and training, safety programs, community relations, wage and salary administration, labor relations, organizational problems and efficiency studies.

Trade Personals

● **Robert J. Cutting** has been appointed auditor of the American Gas Association. The appointment fills a new office in the gas industry trade association.

● **Hester C. Mount** has been named sales manager for the Port Arthur District of Southern Union Gas Company of Dallas, Texas. He will be in charge of residential, commercial and industrial sales activities. In addition to Port Arthur, his territory includes Griffing Park, Groves, Lakeview, Nederland, Pear Ridge, Port Acres and Port Neches.

H. C. Mount

Mary Dunham

● **Mrs. Mary Dunham,** home economist and teacher of cooking, has been appointed home services director for Cascade Natural Gas Corporation. She will supervise cooking schools and demonstrations throughout the territory served by Cascade in Washington, Oregon and Idaho.

● **Earl C. Overbeck,** chairman of the board of the Ohio Fuel Gas Company, retired in July. He worked up through the ranks in a 43-year career to become Ohio Fuel's top officer and has been board chairman for five years.

E. C. Overbeck

J. B. Frost

● **John B. Frost** has been promoted to manager of the new business department for Brooklyn Union Gas Company. He has been with the company since 1935. Other promotions are: **Frank R. Barnitz** to assistant manager of the new business department. He has been with Brooklyn Union since 1931. **Edward J. Cantwell,** an employee since 1921, served for 15 years with the street section before going into sales. **Lester W. Gwaltney,** who joined BU in 1940 as a floor salesman, is the company's new retail sales supervisor. **Eric R. Erikson** has been named assistant district sales manager, Jamaica office.

● **Henry H. St. John,** service and installation superintendent of Southern Union Gas Company's distribution system in Galveston, Texas, has been named superintendent for the natural gas company's midcounty properties in Port Neches and Nederland, Texas.

H. H. St. John

R. D. Stanwood

● **Roger D. Stanwood** has been elected vice president — gas supply, for Transcontinental Gas Pipe Line Corporation.

● Three Dallas men have been advanced to new positions in Lone Star Gas Company's general division of distribution. **H. D. Portwood** has been named to the newly created position of assistant to Vice President **M. L. Bird. R. E. Reading** has been promoted to superintendent of distribution for General Division and **Louis B. Hulcy** moves from the position of control engineer to chief engineer for the division.

● **Robert E. Schill,** manager of the department of economic research of Brooklyn Union Gas Company for the past five years, has joined the management staff of Central Vermont Public Service Corporation as a special financial assistant to President **Albert A. Cree.**

● **Hugh C. Daly** has been elected executive vice president of Michigan Consolidated Gas Company. A former newspaper man, he joined Michigan Consolidated and its affiliated companies as an assistant secretary in 1950. He was named a vice president of American Natural Gas Service Company in 1952, and a vice president and director of Mich-Con in 1953.

● **Walter C. Parshall,** formerly commercial manager of the Eastern division of Rockland Light and Power Company, Nyack, New York, has been appointed to the new post of executive assistant, personnel and public relations department.

Joseph F. Coughlin advances to commercial manager of the Eastern division from his previous post of that division's commercial office manager, and **Clifford E. Moody,** formerly auditor of Rockland Light and Power, has been appointed commercial office manager of the Eastern division.

● **Franklin J. Morrison** has been appointed junior industrial engineer and transferred from Columbus to Zanesville by the Ohio Fuel Gas Company.

L. C. Roberts

L. C. (Bob) Roberts, 56, advertising director of the Lone Star Gas Company, died August 24 at a Dallas hospital following a lengthy illness. He joined the advertising department at Lone Star Gas Company in 1933. In 1942 he was appointed advertising supervisor and in 1951 was named the advertising director.

John H. Aiken

John H. Aiken, 61, vice president, retired, Consolidated Edison, died in July at the Norwalk Hospital after a long illness. He joined the United Company as a statistician in 1922.

John D. Alden

John D. Alden died recently at the age of 79. He formerly was an engineer for the Jersey Central Power & Light Company. He had been retired since 1944.

H. Bruce Andersen

H. Bruce Andersen died recently after a brief illness. Until his retirement in 1955, he had been engineer of distribution for Philadelphia Gas Works division of UGI, where he had worked for 48 years.

Walter C. Dayton

Walter C. Dayton, 72, president of Walter C. Dayton & Associates, Inc. of New York died in June. He had been associated with the gas industry for nearly 50 years and was the inventor of the first autocaloric cracking process for making oil gas.

Cecil K. Drinker

Cecil K. Drinker, former dean of the Harvard University School of Public Health, died recently at the age of 69. He was active in establishing industrial medical practices in the gas industry.

George T. Kelly

George T. Kelly, controller and treasurer of Southern Counties Gas Company from 1950 until he went on disability in 1954, died in June at the age of 49. He began his career in the gas industry in 1929.

Singer B. Irelan

Singer B. Irelan, a director of Cities Service Company and president of Cities Service Oil Company, died in June at the age of 67. He began his career in the gas industry in 1909 and at the time of his death was president of numerous Cities Service affiliates.

Thomas L. Kemp

Thomas L. Kemp, retired general manager of Citizens Gas and Coke Utility, died recently. He was 72 and had been retired since 1952. He joined Citizens Gas in 1935 and served as its general manager from then until his retirement.

TRADE PERSONALS

ABOUT MEN WORKING WITH THE GAS INDUSTRY

● **David R. Prince** has been named district sales manager of the Cincinnati-Dayton territory for the Fulton Sylphon Division, Robertshaw-Fulton Controls Company. **G. L. Leupold** was recently named assistant general sales manager of the Division.

D. R. Prince

R. L. Sylvester

● **Russell L. Sylvester,** formerly with New York Air Brake Company, has joined Rockwell Manufacturing Company as chief engineer of its central valve research and development department.

● **Robert Graves Hess** has been elected executive vice president of the Walworth Company. He formerly was executive vice president of Pesco Products Division, Borg-Warner Corporation.

R. G. Hess

W. D. Willes

● **Weldon D. Willes,** product manager-Nordstrom valves, Rockwell Manufacturing Company, has been named assistant to the president of Rockwell's recently acquired Locomotive Finished Material (LFM) Division in Atchison, Kansas.

● **Theodore C. Guenther** has been appointed advertising manager for conventional and built-in gas ranges, dishwashers, gas clothes dryers, gas space heaters and incinerators manufactured under the Universal trademark, for Cribben & Sexton Company, of Chicago. He was formerly sales promotion manager of the range division, Norge Sales Corporation.

● **John L. McCaffrey** has been elected chairman of the board of directors and chief executive officer of International Harvester Company. **Peter V. Moulder,** formerly executive vice president, has been elected president of the company. **Frank W. Jenks,** formerly vice president in charge of merchandising services, and **Harry O. Bercher,** formerly vice president in charge of the steel division and purchasing and traffic, have been elected executive vice presidents. **Christian E. Jarshow,** executive vice president since 1952, will continue to serve in that capacity.

● **V. A. Kirby** has been appointed vice president and manager, western plants for John Wood Company, Ltd. **T. H. Gibson** is the new vice president and manager of the Winnipeg plant. Kirby has managed the company's Winnipeg plant for over 25 years. Gibson has been vice president and assistant manager for six years.

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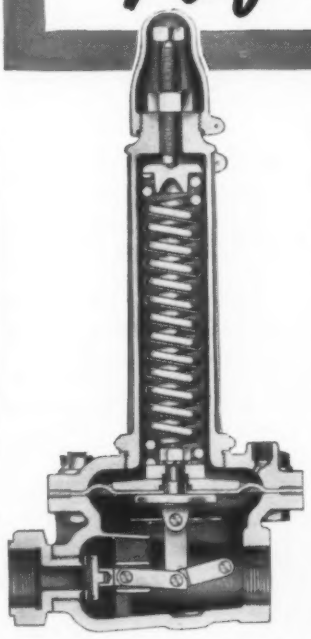

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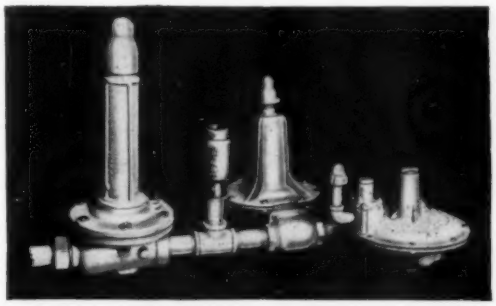


Reynolds Gas Regulator Co.
ANDERSON, INDIANA, U. S. A.
GAS CONTROL SINCE 1892

Trade Personals

● **Warren Owens** has joined the public relations staff of the Better Heating-Cooling Council. He will concentrate on editorial work in the television and consumer magazine fields. Before joining BHC Owens was editor of Mechanical Contractor magazine.

● Surface Combustion Corporation, Toledo, Ohio, honored 163 employees who represent a total of more than 1600 years of service with the company

at an Annual Award Dinner. Three Surface executives received recognition for 40 years of service: (left to right) **E. W. (Doc) Weaver,** chief engineer — Heat Treat Division; **M. Goodman,** general purchasing agent; and **E. P. Heiles,** controller.

● **Roy T. Musselwhite** has been appointed sales manager of ranges and water heaters for Norge Division, Borg-Warner Corporation. Water heater sales manager for the past two years, Musselwhite now also heads sales of free-standing electric and gas ranges.

R. T. Musselwhite

W. E. McCoy

● **William E. McCoy** has been appointed sales manager of Caterpillar's southwest division with headquarters in San Francisco. He succeeds Bernard L. Hagglund, who died in May. McCoy has been with Caterpillar since 1939.

● **Dean E. Madden,** vice president of the A. W. Cash Valve Manufacturing Corporation, Decatur, Illinois, has been re-elected chairman of the relief valve division of the Gas Appliance Manufacturers Association. The division selected **A. F. Carver,** manager of the Patrol Valve Company, Cleveland, as vice chairman and **E. M. Garrett,** plant superintendent for the kits and valve unit of the Welsbach Corporation, Philadelphia, as executive committee members.

● **Robert K. Eskew,** a 23-year veteran of Servel, Inc., has been named chief engineer for "all-year" gas air conditioning. **G. O. Kuhen,** assistant product director, has become product director for Servel.

● **K. M. Thompson** has been named manager of the metropolitan New York branch sales office of Ruud Manufacturing Company. He succeeds the late Don C. Nicol. **V. J. Plouffe** has joined Ruud in Kalamazoo, Michigan, as a technical assistant to **R. N. Spear,** sales manager of commercial gas water heaters.

● **J. L. Gabris** has been appointed assistant general sales manager of the cooking appliance controls division of Robertshaw-Fulton Controls Company. He will continue to be in charge of commercial controls sales and will also undertake assignments in domestic appliance controls sales.

● **Waid V. Clark,** present secretary-controller of the Shovel Company, has been elected to the office of treasurer.

● **Arthur R. Dillon** has been promoted to district supervisor for Heath Survey Consultants, Inc., Wellesley, Massachusetts. He will supervise Heath survey operations in western Pennsylvania, eastern Ohio and West Virginia.

A. R. Dillon

H. W. Rice

● **Harold W. Rice** has been appointed director of the West Coast Research & Development Laboratory of Robertshaw-Fulton Controls Company. He succeeds **H. W. Geyer,** who has resigned.

● **R. R. Allen** has been named vice president and director of engineering and research for the John Wood Company, both in the U. S. and Canada.

R. R. Allen

R. J. Runge

● **Robert J. Runge,** director of advertising of Norge Division, Borg-Warner Corporation, Chicago, has been appointed to the newly created position of director of advertising, publicity, and sales promotion.

● **Robert Evans** has joined the Permaglas Division, A. O. Smith Corporation, as supervisor of engineering for the new line of summer air-conditioning equipment.

H. A. Anderson

F. C. Schaffer

● **Hjalmar A. Anderson** has been appointed a sales engineer for the Industrial Furnace Division of The Gas Machinery Company, Cleveland, Ohio. **Francis C. Schaffer** has joined the company in research and development. **William A. Anthony** has joined the Gas Machinery Company to head engineering and sales of a new line of continuous mixers.

W. A. Anthony

● **George Swanson** has been appointed regional sales representative for Adams Pipe Repair Products, El Monte, California. Headquartered in Chicago, he will serve utilities in Illinois, Wisconsin, Indiana, and Michigan.

● **E. A. Nash** has been appointed sales manager of the home appliance division of Servel, Inc. He will have charge of Servel's appliance sales organization, and will supervise the company's relations with appliance distributors and utility companies.

● **Maurice I. Roth Jr.** has been appointed to fill the newly created position of sales manager for original equipment, liquid filters divisions of the Dollinger Corporation in Rochester, New York.

● **K. H. "Ken" Flint,** manager of Permaglas heating and air conditioning engineering for the A. O. Smith Corporation, has been appointed chairman of the Members of Control House Heating Approval Requirements Committee.

● **Renne G. Rankin** has been named field sales manager for the Blend-Air heating and air conditioning division of the Coleman Company, Inc. **Hascal Simmons,** former field sales manager, has been appointed manager of the Coleman branch sales office in Kansas City, Missouri.

C. T. "Cy" Burg, 62, vice president, Iron Fireman Manufacturing Company, Cleveland, died in August after several months of illness. He had been in charge of Iron Fireman sales since the company was organized in 1923 in Portland, Oregon, and has been a vice president of the company since 1946.

Trade Personals

● **John Wallerius** has been appointed chief engineer for Lindberg Industrial Corporation. Prior to joining Lindberg, he was associated for 25 years with Sunbeam Furnace Division as chief engineer, and more recently with Sigma Metallurgical Company as president.

John Wallerius

Hallberg Hanson

● **Hallberg Hanson** has been appointed plant manager of the new $1,000,000 Polyken industrial tape plant, now under construction in Franklin, Kentucky, for the Kendall Company.

● **Henry A. Jacker** has been appointed manager of foreign operations for Roots-Connersville Blower, division of Dresser Industries, Inc., Connersville, Indiana.

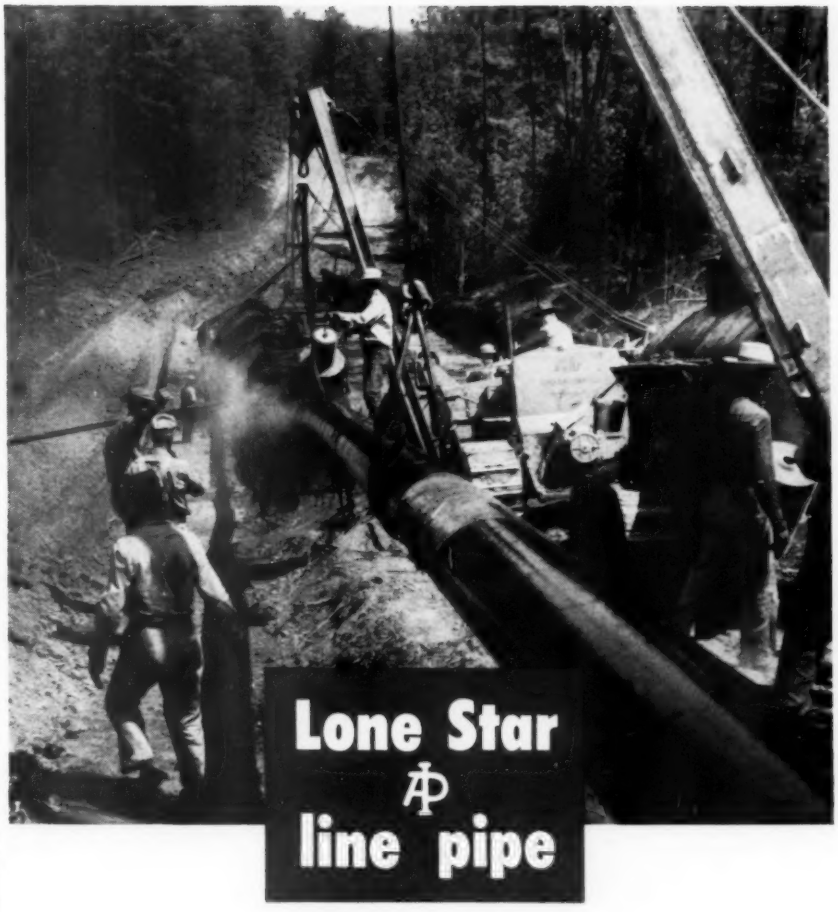
● **John G. Seiler** has been elected president of Tube Turns, Louisville, Kentucky, a division of the National Cylinder Gas Company, Chicago. He succeeds **George O. Boomer,** retired. Boomer will continue as chairman of the executive committee of the National Cylinder Gas Company.

● Fischer & Porter, Hatboro, Pennsylvania, has announced three promotions in its sales department. **Philip E. Sellers,** formerly sales manager, becomes sales vice president; **Herman Kockritz,** formerly southeastern divisional manager becomes field sales manager and **William Treathaway,** formerly sales engineer, becomes district manager of the Atlanta office.

● **D. W. Proulx** is the new national product manager for water heaters, plumbing and heating division of Rheem Manufacturing Company. **Robert J. Pierce Jr.** has been appointed to the new assignment of national advertising and sales promotion manager of the plumbing and heating division. **B. Edward Soby** has resigned to start his own business in the San Francisco area.

● **Harold W. Wagner** has joined the sales force of the Tappan Stove Company, Mansfield, Ohio.

● **George R. Winkley,** former production control manager, has been made treasurer and assistant to the president of Thor Power Tool Company. **William E. Sopusek** is relinquishing his duties as office manager to become secretary.



standard of the industry

in the Mid-Continent area

The huge, ultra modern Lone Star Steel plant was built primarily to serve the busy Mid-Continent area . . but week after week, pipe orders come in for tons of Lone Star API line pipe, casing and tubing to be used in distant territory.

From mining of the ore through Lone Star's precision pipe mills..Lone Star's API pipe quality is controlled in every step of manufacture. Lone Star line pipe has uniform wall thickness and roundness, is easy to field weld and easy to bend.

Neighbor, wherever you are, specify Lone Star and we both get a good deal.

Lone Star STEEL COMPANY

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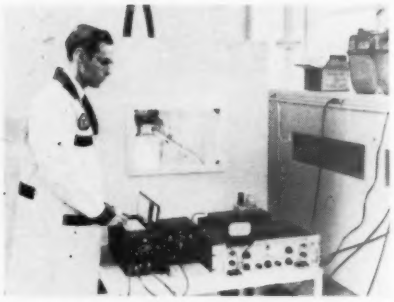
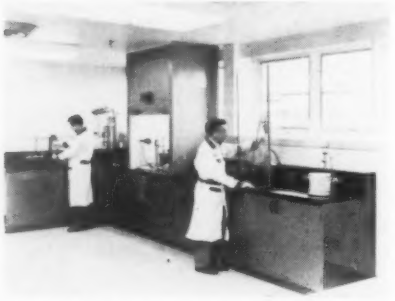
DISTRICT SALES OFFICES
Houston, Texas | Midland, Texas | San Antonio, Texas
Tulsa, Oklahoma | Wichita Falls, Texas | Shreveport, La.

TRADE NEWS OF THE GAS INDUSTRY





Gene Perrine, project engineer, uses new equipment to make sonic check of the #250 Rockwell meter in Rockwell Manufacturing Company's new Du Bois, Pennsylvania research and development laboratory. Left, Ken MacRae, chemical engineer, experimentally impregnates powdered metal parts while Harold McGlinsky runs a qualitative analysis.

Rockwell Opens "World's Largest" Meter Research Lab

Rockwell Manufacturing Company recently opened the world's largest and most modern gas meter research and development laboratory in Du Bois, Pennsylvania, according to Lloyd A. Dixon Jr., vice president in charge of the meter and valve division.

The new laboratory is completely air conditioned and equipped with new scientifically engineered lighting for running wear and endurance tests on diaphragms, complete meter mechanisms, and gears. The new department will enable Rockwell to make comparative corrosion tests both on the materials already in use in meters and proposed future materials, such as synthetics for diaphragms and various types of plastics.

A new salt spray unit will permit salt spray and humidity tests on different materials in order to determine the effects of atmosphere and salt spray on various parts used in their meters.

Other outstanding features of the new department include: Mechanical facilities for testing sample parts and sample meters and for running quality tests right on the production line. A new mechanical laboratory for further development work and research on Rockwell automatic electronic provers. A sound room for detection of sounds and sound evaluation equipment for locating and recording volume of noises in meters and other equipment. A chemical laboratory for testing materials to determine their suitability for use in gas meters and equipment for experimental work on forming, testing, and impregnating various kinds of powdered metal.

In addition to the new laboratories, ample space has been provided for offices for engineers and draftsmen.

Roper Wins Merit Award

Financial World has presented a Merit Award to the Geo. S. Roper Corporation, Rockford, Illinois, in recognition of the company's 1955 Annual Report to shareholders. The citation was given "for distinguished achievement in annual reporting for two consecutive years and . . . excellence of its 1955 Annual Report. . . ."

GAMA Elects New Members

Six United States firms and two in Canada have been elected to membership in the Gas Appliance Manufacturers Association.

The new members are: All American Fabricators, Los Angeles, heater and range connectors and fittings; the Barnes Heating Equipment Company, Inc., Los Angeles; the Central D. Manufacturing Company, Culver City, California, range, furnace, and heater connectors; the Chilton Company, trade magazine publisher, Lynchburg (Virginia) Foundry Company, cast-iron pressure pipe and fittings;

Steamway Products, Inc. of Cleveland, relief valves; D. Talarico Registered, Montreal, Quebec, forced-air furnace, and Western Gas Engineering & Equipment, Ltd. of Vancouver, British Columbia, gas conversion burners and development of industrial gas equipment.

200,000th Home Meter Spotlights Metered LP-Gas

Presentation of a gold LP-Gas meter, two silver plaques, free kitchen appliances, and dealer celebrations throughout Central New York marked the installation in August of the 200,000th home LP-Gas meter to be put in service by dealers of Fuelane Corporation, Liberty, New York.

A sterling silver plaque marking the event was presented to Callan and Clark, Inc., local dealer who installed the 200,000th meter for Fuelane. Fuelane received a similar plaque from American Meter Company, maker of the 200,000 meters, who also presented Fuelane the gold-plated meter as part of the celebration.

The 200,000th "Happy Cooking" metered gas customer received a variety of kitchen appliances from Callan and Clark including an automatic gas stove, gas clothes dryer and a hot water heater. Installation of LPG facilities was also furnished by the dealer.

C. Benson Dushane, Jr., American Meter Company sales vice president, (right) presents the gold-plated LP-Gas meter to C. M. Francisco, president of Fuelane Corporation, Liberty, New York (left), marking the installation. Clair Callan, president, Callan and Clark, Inc., holds a sterling silver plaque presented to his firm.

Trade News Notes

Bryant Division of Carrier Corporation has begun construction on a 100,000 sq ft warehouse close to the company's manufacturing plant in Indianapolis. Scheduled for completion in November, the brick and steel structure will cost an estimated $700,000.

Tube Turns recently has acquired 13 acres of property adjacent to its main plant in Louisville, Kentucky. Costing $2,000,000, the land will be used for industrial expansion.

The Seamless Rubber Company of New Haven, Connecticut, has acquired the Kraloy Plastic Pipe Company, Inc., of Los Angeles. Kraloy, working with gas and water utilities, helped pioneer the use of rigid plastic pipe for utility service.

Tel-Electric Distributors, Inc., Spokane, Washington and Ray Distributing Company, Savannah, Georgia, are now distributing gas appliances for the Norge Division, Borg-Warner Corporation. Tel-Electric territory includes 27 counties in the states of Montana, Idaho, and Washington. Company president is Leonard G. Albert. Ray Distributing Company will cover 68 counties in Georgia. Fred A. Ray is president of the company.

Fischer & Porter Company's new sales office in Pensacola, Florida, will cover the Gulf Coast portions of Florida, Alabama, and Mississippi.

Rockwell Manufacturing Company plans a new 180,000 sq ft valve manufacturing plant at Kearney, Nebraska. Approximate cost will be $2,000,000 and will employ an estimated 500 people by 1960.

Dresser Industries, Inc. has changed its state of incorporation from Pennsylvania to Delaware. The change was made primarily for technical reasons and will not affect the company's operations.

Recent appointments for Servel distributorships include: E & M Supply Company of El Paso, who will cover the state of New Mexico and El Paso County in Texas; Flemco Corporation, Ft. Wayne, Indiana, will cover 12 counties in northeastern Indiana, Branch County, Michigan, and Paulding and Van Wert Counties in Ohio; Mid West Sales & Service, Inc., South Bend, Indiana, whose territory will include 11 northwestern counties in Indiana, and Berrien, Cass, and St. Joseph Counties in southwestern Michigan.

DRAGNET
leak detector

detects and locates leaks on any pressure piping system in a matter of minutes!

PATENTS PENDING

Here's the newest time-saver in the industry! The compact, portable Dragnet Leak Detector will detect even the tiniest leak on any pressure piping system for gas, steam, water or refrigeration. Unique "bubble action" principle much faster than by using pressure gauge or manometer.

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provides two features
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the BTU CONTROL, is a recent addition to the caloroptic line! Designed to provide modulated control for your motorized valve by varying the BTU up and down . . . thus maintaining the proper standard.

CONNNELLY, *Inc.*

Elizabeth, N. J
3160 South California Ave, Chicago 8, Ill.

Dallas Firm Builds Illinois LPG Tank Plant

Master Tank & Welding Company, Dallas, Texas has announced construction of a new plant in Quincy, Illinois. Being built for the production of LPG tanks, the all steel construction will contain a total of 15,000 sq ft of manufacturing space in addition to an adjacent office building.

When completed the plant will have more than 1500 ft of power conveyors and a 10 ton overhead crane. Rail tracks will run through the building and the property includes a private dock on the Mississippi River.

Production in the new plant was scheduled for early August. The plant has a capacity of 5040 500 gal gas propane tanks per month on a three-shift operation.

Dresser Earnings Up 67 per cent

Dresser Industries, Inc., Dallas, Texas, has acquired the assets of the Guiberson Corporation, Dallas, oldline manufacturers of oilwell drilling and production equipment. The consideration was the issuance of aproximately 110,000 shares of Dresser common stock.

Guiberson will be an excellent addition to Dresser, according to H. N. Mallon, president. With its modern machine shop and rubber molding facilities, Guiberson will be an ideal place to produce Dresser's Turbodrill, Mallon pointed out in his quarterly report to Dresser shareholders.

Net earnings after taxes showed an increase of 72 per cent over the same period a year ago, totaling $4,656,024, while sales for the same period were $62,688,896, an increase of 46 per cent, Mallon reported.

Earnings per share, computed on the basis of the 2,062,349 shares outstanding as of July 31, totaled $5.68. Total net earnings for the first three quarters of 1956 amounted to $11,705,776 by comparison with $7,038,681, an increase of 67 percent.

Clark Gets UL Listing for Three 'Powrworker' Models

Clark Equipment Company has received Underwriters' Laboratories listing for type "EE" construction of the "Powrworker" pallet truck, "Powrworker" platform truck and 12-volt "Tugger" towing tractor. UL listing means that the equipment has been approved for use in Class II, Division 2 locations, which UL defines as locations where accumulation of combustible dust may be sufficient to interfere with safe dissipation of heat from electrical equipment.

H&M MODEL "30"

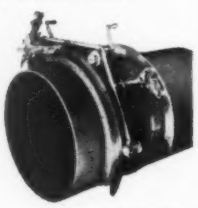
You're "paying for the butcher's thumb" when you use *oversized equipment* on 30" pipe cutting and beveling operations! — because H&M Model "30" is designed *specifically* for the 26" to 30" range of pipe — *at lower cost.*

The increasingly widespread use of 30" pipe on gas transmission lines demands specialized equipment for greater savings, more speed and efficiency.

So, H&M now offers its Model "30", built on the same split-gear principle as all H&M machines, and with the same lightweight but rugged construction, with same ease of operation and economy in both field and shop.

WRITE FOR ILLUSTRATED BULLETINS ON THE COMPLETE H & M LINE

- PIPE CUTTING & BEVELING MACHINES From 1½" to 36"
- SHAPE CUTTER
- OUT-OF-ROUND
- FLEXIBLE SHAFT
- MOTORIZED UNITS



PAT PENDING

LIGHT AS A FEATHER

H&M T M REG

PIPE BEVELING MACHINE CO.

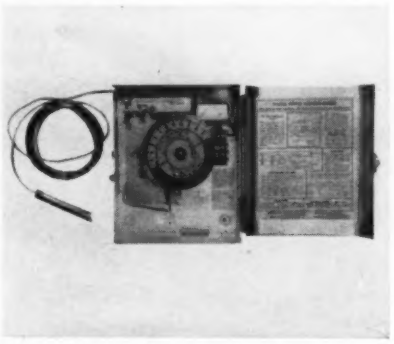
311 E. THIRD ST. • TULSA • Diamond 3-0241

NEW EQUIPMENT
FOR THE GAS INDUSTRY

Vacuum - Brush. J. W. Leonard Company is offering a midget vacuum-brush for gas service men. Brush cleans upholstery, draperies, lamp shades, clothing, car upholstery, hard-to-get-at corners, ornate furniture. Does jobs that regular cleaners can't do. Three volt motor whisks dust and lint into dust collecting bag. Two flashlight cells furnish the power.

J. W. Leonard Company, Dept. AGJ-M-6, 550 Fifth Avenue, New York, 36, New York.

New Time Switch. A new time switch that automatically regulates the hours of building heating and divides the day into three periods of heating, has been developed by Automatic Devices Company, Inc. Weather-Chron contains two switch circuits. The first operates the burner or valve, with only the safety high-limit controller in the



circuit regulating heat generation or flow. The starting time of this morning build-up period changes automatically as the outdoor weather changes. At a pre-selected time, the second switch of the timer connects the "daytime" heat flow controller with the circuit to provide a regulated heat flow throughout the day. Heat flow is stopped, or reduced, at a pre-selected night-time hour. One-day or seven-day models are available.

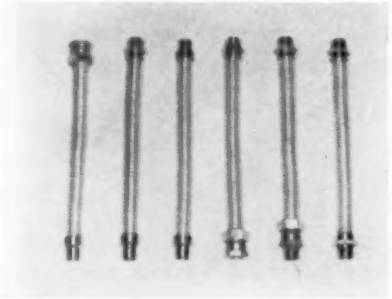
Automatic Devices Company, Inc., 714 Hillgrove Avenue, Western Springs, Illinois.

New Trenching Machine. New light weight Baby Ditch-Witch trenching machine, ideal for cutting narrow trenches for L-P fuel lines from the tank to the house, has been announced by The Charles Machine Works. A 2-in. wide trench can be cut at any variable 2-in. depth to 18 in. deep by this

new Model B which can be transported easily in any pickup. Unit is also built with a 12-inch bucket line. Powered by a 2.5 hp engine, only 25 to 30 lb manual pressure is required on the handle bars for an 8-in. trench in average soil, a trench of 4 to 8 ft length per minute will result.

The Charles Machine Works, Perry, Oklahoma.

Flexible Hose. Techniflex Division has announced a new flexible hose — Flexco. Flexco is a seamless brass flexible line with many uses, both domestic and industrial, where working pressures are 120 psi or less. Hose is designed for conveying steam, oil, water, air, or any other liquids and



gases that are non-corrosive to copper alloys with 120 psi working pressure and 2000 lb burst pressure. Available in ⅜-in. or ½-in. hose with fitting combinations, in lengths from inches to 5 ft.

Techniflex Division, Port Jervis, New York.

"Private Line" Radio. Motorola has announced a Private Line radiophone claimed to utilize a new circuitry concept to effectively provide private interference-free mobile communications. Private Line radio, unlike the conventional tone-pulse selective calling system, employs a continuous, inaudible subcarrier tone on the transmitted carrier. The coded signal received operates an exclusive tone-coded receiver squelch circuit (patent pending). Squelch sensitivity is automatically and electronically maintained at optimum. Interfering signals cannot "trip" or "lock-in" the squelch circuit since continuous presence of the properly coded carrier is required to keep the speaker unmuted. There are no additional buttons, lights, adjustments or operational techniques involved.

Motorola Communications and Electronics Inc., Technical Information Center, 4501 West Augusta Boulevard, Chicago 51, Illinois.

Cleaning Tool. A super-jet condenser cleaning tool that provides extremely fast and effective cleaning of condenser tubes is now available. It utilizes a handy gun-and-slug method

to thoroughly remove slime and scale at a considerable time savings. One man can quickly load an entire bank with cleaning slugs and shoot them through in rapid succession. The result is substantially reduced labor and shutdown time. Gun is a lightweight rugged duty tool, weighing only 2¾ lb and can be operated by either air or water pressure. Effective pressures range from 50 to 200 psi. Three types of cleaning slugs in sizes to fit all standard tubes are available. Photograph shows (top) super-jet condenser tube cleaner gun and (bottom, left to right) spool-type, bullet-shaped and scraper-type cleaning slugs.

Crane Packing Company, Dept. AGJ, 6400 Oakton Street, Morton Grove, Illinois.

Balanced Trenching Machine. The Auburn Machine Works, Inc., has converted the International 300 Utility Tractor into a balanced trenching machine. A geared spacer — with all gears running in oil — has been inserted behind the tractor transmission that lengthens the wheelbase six inches, puts more weight on the front wheels

and makes for smoother digging and straighter trenches. A hydraulic drive provides power for propulsion while digging at any digging speed up to 600 ft per hour, depending on soil conditions. The new machine is capable of digging trenches 6 to 14 in. wide and up to 6 ft deep. Weight is approximately 1850 lb.

Auburn Machine Works, Inc., Auburn, Nebraska.

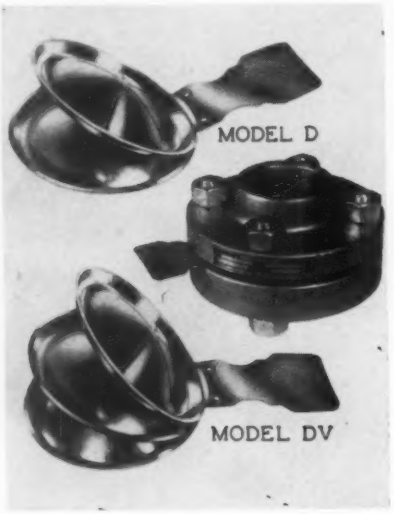
Burners for Radiant Heating of Furnaces and Ovens. Eclipse Fuel Engineering Company has developed a special series of burners, the "RT" (radiant tube) burners designed for easy application to radiant heating tubes used in industrial furnaces and ovens for the wide distribution of indirect heat. Burners operate on air pressure of approximately 8 oz and low pressure gas, normally below ½ lb. Made in two sizes and by use of adapter castings these two sizes can be utilized to fire radiant tubes with outside diameters ranging from 3¾ in. to 8½ in. The burners will fire from 250,000 to 400,000 Btu per hour operating on 8 oz air.

Eclipse Fuel Engineering Company, 1002 Buchanan Street, Rockford, Illinois.

Gas Leak Probing. Engineers Tool Company offers a gas leak probe that makes prospecting for gas leaks easier, faster and safer. This M-pact-O Probe is to be used with explosion test meters. The impaction feature eliminates hammering with a heavy sledge. Reciprocating motion of weighted handle operates it. Probe will penetrate to depth of 40 in. (Spark resistant probes and probes for deeper penetration also available.) M-pact-O Gas Leak Probe will penetrate six inches of asphalt.

Engineers Tool Company, 116-118 West Main Street, Lake City, Iowa.

Rupture Disc. Black, Sivalls & Bryson, Inc. has announced a new type rupture disc that extends the advantage of safety head protection to many installations now operating under pressure, temperature and corrosive conditions too severe for conventional type discs. The new D and DV Rupture



Disc extends the range for high temperature applications, provides maximum service under pulsating or reversing pressure conditions, and permits closer operation to rupture pressure. Also makes lower minimum rupture pressures possible and gives extended service under pressure surges that approximate the rupture pressure.

Catalog 77-31, Black, Sivalls & Bryson, Inc. Product Information Department, 7500 East Twelfth Street, Kansas City 26, Missouri.

Back Hoe-Backfill Blade Combination. The Wain-Roy Corporation has recently announced the manufacture of a combination back-hoe and backfill blade attachment for the International 300 tractor. The handy, low-cost combination is engineered to handle an amazing number of differ-

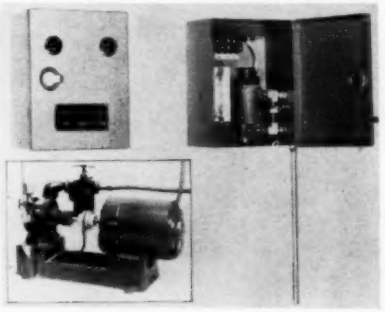
ent trenching jobs, bell hoe and foundation excavation, plus backfilling, leveling, grading, etc. Hoe is a complete, self-contained unit and can be removed or attached in less than 30 minutes. On the forward end of the sub-frame, a sturdy six foot backfill blade is mounted. This blade raises and lowers hydraulically a distance of 18 in. above the grade to 8 in. below grade.

Wain-Roy Corporation, Hubbardston, Massachusetts.

Portable Thermostat Calibrator. Tuttle Electric Products, Inc., has announced that Calmaster, a portable heating device that provides a fast, simple, and accurate method of calibrating gas or electric oven thermostats, either separately or assembled in a range is now available from their Illinois plant. Calmaster saves time in checking and resetting thermostats to meet local conditions by eliminating the necessity of heating the entire range oven. It reduces the normal 45-60 minute checking time to 8 minutes per oven. The unit is economically priced and any unskilled service or repairman can learn to operate the unit in a few minutes. Two models are available.

Calmaster Inc., Division of Tuttle Electric Products, Inc., Kirkland, Illinois.

Sample Drawing Accessory. The Accessory to the standard J-W Model E combustible gas alarm (pictured with front panel open), is mounted in a non-hazardous location, draws sample gas continuously through a copper line from a remote danger area. Typical applications include: A baking or drying operation or an engine-testing room where extreme temperatures are normal. Wherever excessive dirt, moisture,



or other foreign matter are present. Wherever gas is present under slight pressure such as in a tank or drum. An inaccessible area such as an underground tunnel, a trench, a pit, etc. Outside fittings on the J-W Sample Drawing Accessory provide for connection of the sample line to a vacuum source for forcing the sample flow if necessary. A high-quality pump (pictured inset), driven by a ¼ hp motor and specially recommended for this purpose, is offered at additional cost.

Johnson-Williams, Inc., 2669 Park Boulevard, Palo Alto, California.

Trencher-Digger. Agrihoe is the small crawler tractor with trencher-digger attachment that is manufactured by Joost. Advantage of the Agrihoe is its ability to perform in limited spaces where larger equipment cannot

maneuver. Unit consists of a Model F Long Track Agricat equipped with a hydraulically-operated back-hoe attachment. Agrihoe has a 10 ft reach, digs to a 6 ft depth, and loads to a 7 ft height.

Joost Manufacturing Company, 742 Bancroft Way, Berkeley 10, California.

Gas Appliance Tester. Goldak Company has recently announced the addition of a gas appliance tester, Model G-6, that is capable of reading the millivolt output of thermocouples and pilot generator sets from 0 to 1000 mv. It can be used as a millivolt "driver" or generator to replace the thermocouple and thereby test the electromagnets for

"pull-in" and "drop-out" points. It can be used as a continuity checker to find opens, shorts, or faulty connections in wiring systems. And, it has a light indicator circuit and jacks for reading both line voltage and 24 v AC for that type of system. Unit is housed in a 4 in. by 7 in. by 3 in. aluminum case and is powered by a single flashlight cell, clip-mounted below the face panel.

The Goldak Company, Inc., 1544 West Glenoaks Boulevard, Glendale 1, California.

RIGHT on the LINE

HAYS STOPS FOR

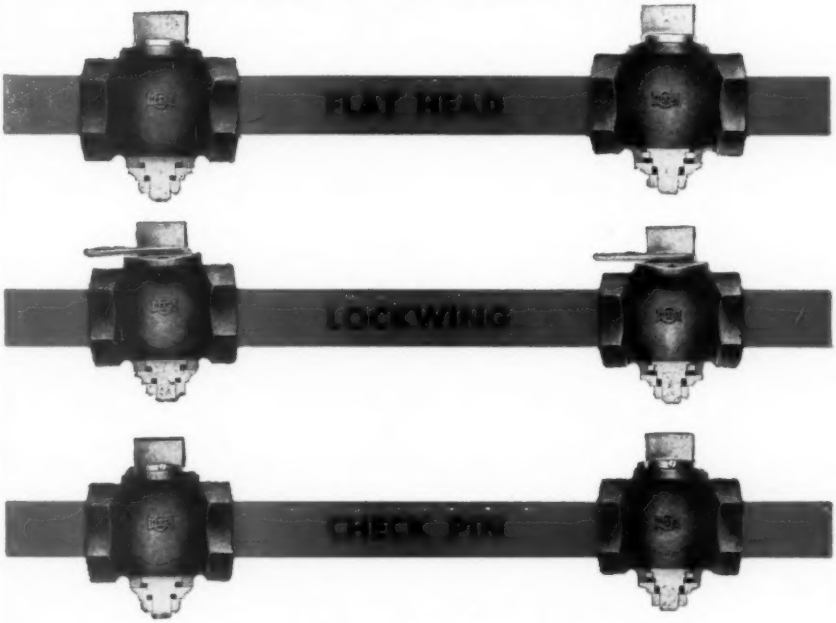
SERVICE LINES · METERS · APPLIANCES

REGULAR PATTERN

"KEY-LOK" TAMPER PROOF

Full Range of Sizes

Iron Body with Brass Plug ... Black or Galvanized



Quality Assured — By Precision Machining ... Individual Testing ... Rigid Inspection

Quality Proven by Supplying the Gas Industry for Over 80 Years

Hays also manufactures a full line of all brass stops

STANDARD PACKAGING

Another Hays First

for Easy Handling ... Space Saving Storage

Write for Literature or ask "The Man From Hays"

HAYS

GAS SERVICE PRODUCTS

HAYS MANUFACTURING CO.

ERIE, PA.

NEW LITERATURE
FOR THE GAS INDUSTRY

Automatic Control Valves. P-K Industries has released a catalog listing their specifically designed valves for the tougher, more difficult problems in automatic and manual valve operation. Operating features, performance and engineering data, specifications and sizes are included in the 20 page catalog.

P-K Industries, Inc., 27 Porete Avenue, North Arlington, New Jersey.

"Opportunity Unlimited." Wolverine Tube, Division of Calumet & Hecla, Inc., has announced a new booklet designed for many industries "Opportunities Unlimited—Using Wolverine Trufin." Booklet covers a number of the numerous applications where Trufin is used and can be used effectively and economically. It includes applications in such industries as processing, electrical, water heater, refrigeration and allied industries.

Wolverine Tube, Division of Calumet & Hecla, Inc., Guardian Towers, Guardian Building, Detroit 26, Michigan.

"Fax-File" Sales Tool. A new edition of the "Fax-File" sales tool for salesmen of Servel gas refrigerators is now ready for distribution. The pocket-sized file gives retail salesmen fingertip product information. Made of individual easy-to-handle cards securely held together by a grommet that allows cards to be spread for convenient model reference, the cards give features, specifications and dimensions for each gas refrigerator model in the Servel line.

Servel, Inc., Evansville, Indiana.

Heat Treat Review. Surface house organ (July) contains an article on the solution of a variety of heat treat problems in a southern California commercial heat treat shop. Other stories tell about the improvement of heat treat results with modern gas chemistry and how a team of furnaces produces higher-quality parts in an aluminum fabricating plant.

Surface Combustion Corporation, Toledo 1, Ohio.

Gas Pressure Switch. A new industrial gas pressure switch especially designed to meet Factory Mutual requirements for use on multiple burner gas installations has been released by Minneapolis-Honeywell.

Specification S1011-1, Minneapolis-Honeywell Regulator Company, Wayne and Windrim Avenues, Philadelphia 44, Pennsylvania.

Casting Repairs. The Chain-Lock method for perfect cold repair of cracked or broken castings, is now being marketed in kit form by the Chain-Lock Process Company. Kit contains all tools, equipment, and instructions necessary to repair engine blocks, heads, cylinder-valve ports, housings, or any other automotive, industrial or marine casting.

Chain-Lock Process Company, 2500 East York Street, Philadelphia 25, Pennsylvania.

Tractor Shovels. Frank G. Hough Company has released an informative bulletin covering bulk-materials handing problems. Titled "Modern 'Payloader' Tractor Shovels In Industry," the bulletin describes and illustrates a wide variety of industrial materials-handling applications for tractor-shovels, including case histories of Payloader operation in a number of plants. Specifications on the complete line of Payloader tractor-shovels are provided.

No. 304, The Frank G. Hough Company, 960 Seventh Street, Libertyville, Illinois.

Revised Pump Bulletin. A revised bulletin on monobloc centrifugal pumps for air conditioning systems has been issued by Worthington Corporation. Available with heads to 120 ft and capacities to 240 Gpm, the monobloc centrifugal pumps are designed to offer a wide range of sizes to fit every pumping system. The pumps feature oversize ball bearings for long trouble-free lift; standard industrial type motor; one-piece pyramid base, end shield and bracket. They can be mounted horizontally, vertically, or on the wall. Bulletin graphically illustrates ratings, dimensions and variety of sizes.

Bulletin W-306-B3D P. Advertising & Sales Promotion Department, Worthington Corporation, Harrison, New Jersey.

Chemical Booklet. A new 20-page booklet describing briefly the complete line of Mathieson chemicals for industry has been issued by Olin Mathieson Chemical Corporation. The new booklet covers the company's organic, inorganic and specialty chemicals, listing characteristics, grades, containers and producing points for each. Principal uses are given for organic chemicals and specialties.

Olin Mathieson Chemical Corporation, Industrial Chemicals Division, Baltimore 3, Maryland.

Melting Furnace Catalog. An eight-page two-color catalog that fully describes the complete line of auxiliary items commonly used in conjunction with melting furnaces in the foundry has been issued by Lindberg Engineering Company. Replacement linings, high temperature cements, silicon-carbide base blocks, oil burners, blowers, cast iron pots, and oil or gas fired bell ladle heaters are listed.

Bulletin 601, Lindberg-Fisher Division, Lindberg Engineering Company, 2450 West Hubbard Street, Chicago 12, Illinois.

Rockwell Revises Bulletin. A revised version of Rockwell '1001' Regulators has been issued. New features of the revised 12-page bulletin include:

Photo-illustrated descriptions of Rockwell's recently introduced 250-lb type high-pressure model of the '1001' that offers a maximum capacity of 200 psi and outlet pressure range from 5 to 60 psi; and complete maximum capacity tables for all '1001' models along with explanation of the tables themselves and the ratings based on them.

Bulletin No. 1059, Meter and Valve Division, Rockwell Manufacturing Company, 400 North Lexington Avenue, Pittsburgh 8, Pennsylvania.

Truck Catalog. International Harvester Company is offering a new 20-page catalog that contains complete information on International four-wheel conventional and cab-over-engine heavy-duty trucks with six-cylinder engines. Gasoline, LPG, and diesel-powered models are covered. Catalog presents design and operating features of the four-wheel R-line and CO models, as straight trucks and truck tractors.

No. CR-674-F, Consumer Relations Department, International Harvester Company, 180 North Michigan Avenue, Chicago 1, Illinois.

Peak Shavings

. . . . with laughing gas

Dignity is one thing that cannot be preserved in alcohol.

"A good carpenter is one who can keep a straight face while repairing a do-it-yourself project."

Two fleas had just finished a hard day at the circus. Said one, "Shall we walk home or take a dog?"

A camel is an animal that looks as if it had been put together by a committee.

"Jarvis, why didn't you put out my gloves tonight?" the bachelor asked his butler.

"But sir, you said you were calling on a lady and I thought you would feel better without them."

A closed mouth gathers no feet.

This inquiry came to the reservations desk of a resort hotel: "Do you have suitable accommodations where I can put up with my wife?"

Physiciatrist to patient: "When did you first discover that you enjoyed paying your income taxes?"

A sense of humor is what makes you laugh at something that would make you mad if it happened to you.

A Sunday School teacher had been telling a class of little boys about crowns and glory and heavenly reward for good people.

"Now tell me," she said at the close of the lesson, "who will get the biggest crown?"

There was silence for awhile, then Johnny answered confidently: "The one that's got the biggest head."

An engagement is an urge on the verge of a merge.

Tact is the art of making your company feel at home when you wish they were.

Sign in a western bar: We don't have TV, but we do have a fight every night.

A Texan struck oil and built a mansion and three swimming pools. One pool he fills with cool water and another with warm water; the third he keeps empty. He explains: "A lot of my friends can't swim."

The ladies of the local Red Cross chapter have discarded clothes of all kinds. Call at their headquarters to inspect them.

Two characters had been drinking merrily for some time when one lost his grip on the bar and fell face down on the floor.

"That's what I like about Slim," his companion remarked. "He's dependable — always knows when to stop."

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JOHN WOOD Automatic Gas Water Heaters are highest-quality heaters, known for their dependable, trouble-free performance. Nationally advertised. Fully warranted. A wide variety of sizes, models, and prices to meet any sales situation.
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Experience can keep you out of trouble in fighting corrosion, too.

Why gamble with "unknown quantities" when it comes to protecting pipe, pipe joints, couplings and other vulnerable surfaces above and below ground?

Since 1941, TAPECOAT, the quality coal tar coating in handy tape form, has demonstrated its ability to withstand corrosion year after year. In case after case, TAPECOATed lines have been dug up after 10 years of service *with no signs of deterioration on the pipe surfaces uncovered.* That's why TAPECOAT is specified by those who know that continuing protection is the first consideration.

Everything considered, you'll be money ahead by using TAPECOAT to give you the quality protection you need for reduced maintenance and replacement cost.

Write for brochure and prices.

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Evanston, Illinois

New Literature

Pipe, Fittings, and Valves. An eight-page illustrated bulletin on its line of high impact rigid Koroseal pipe, fittings, and valves has been published by The B. F. Goodrich Company. Brochure explains how Koroseal pipe is installed, reviews product applications and describes physical properties. Also described is the use and installation of Koroseal valves.

B. F. Goodrich Company, Plastic Products, Marietta, Ohio.

Diesel Tractor. A series of assembly and parts photographs are used in a new 16-page, two-color Allis-Chalmers catalog to illustrate the copy giving design, engineering, and operating highlights of the company's 75 hp HD-11 diesel powered crawler tractor. The new catalog contains specifications and a two-page spread devoted to the line of equipment matched to the HD-11

Catalog MS-1100, Allis-Chalmers Manufacturing Company, Milwaukee, Wisconsin.

How American Standards Are Made. This booklet describes the three ways standards become nationally-accepted and approved as American Standards. Tells who makes these American Standards and why, and who uses them. Explains what the American Standards Association is, how it guards the democratic processes through which American Standards are developed, and how it operates impartially for the manufacturer, the consumer and the general public.

Dept. PR-AGJ, American Standards Association, 70 East 45 Street, New York 17, New York.

Batch Type Furnace. Three models of Surface Allcase furnaces are described in a new two-color bulletin. The Allcase batch type furnaces have an operating range from 1400 to 1750F and can be used for gas carburizing, clean hardening, dry cyaniding, carbon restoration, homogeneous carburizing, clean annealing, oil quenching or marquenching. Bulletin illustrates suction radiant tube fired units and the available mechanized allcase systems.

Bulletin SC-174, Surface Combustion Corporation, Toledo 1, Ohio.

FOR SALE

Two (2) Blaw-Knox Electroil Foggers, model 1-75, 150 psig operating pressure, purchased in 1950 — used, but in good condition. The units are assembled as a package on steel skids.

For bid forms and other information contact the Contracting Officer, Dept. of Purchases and General Services, 4th floor, Mosque, Laurel & Main Streets, Richmond, Virginia. Telephone 7-7611—extension 241.

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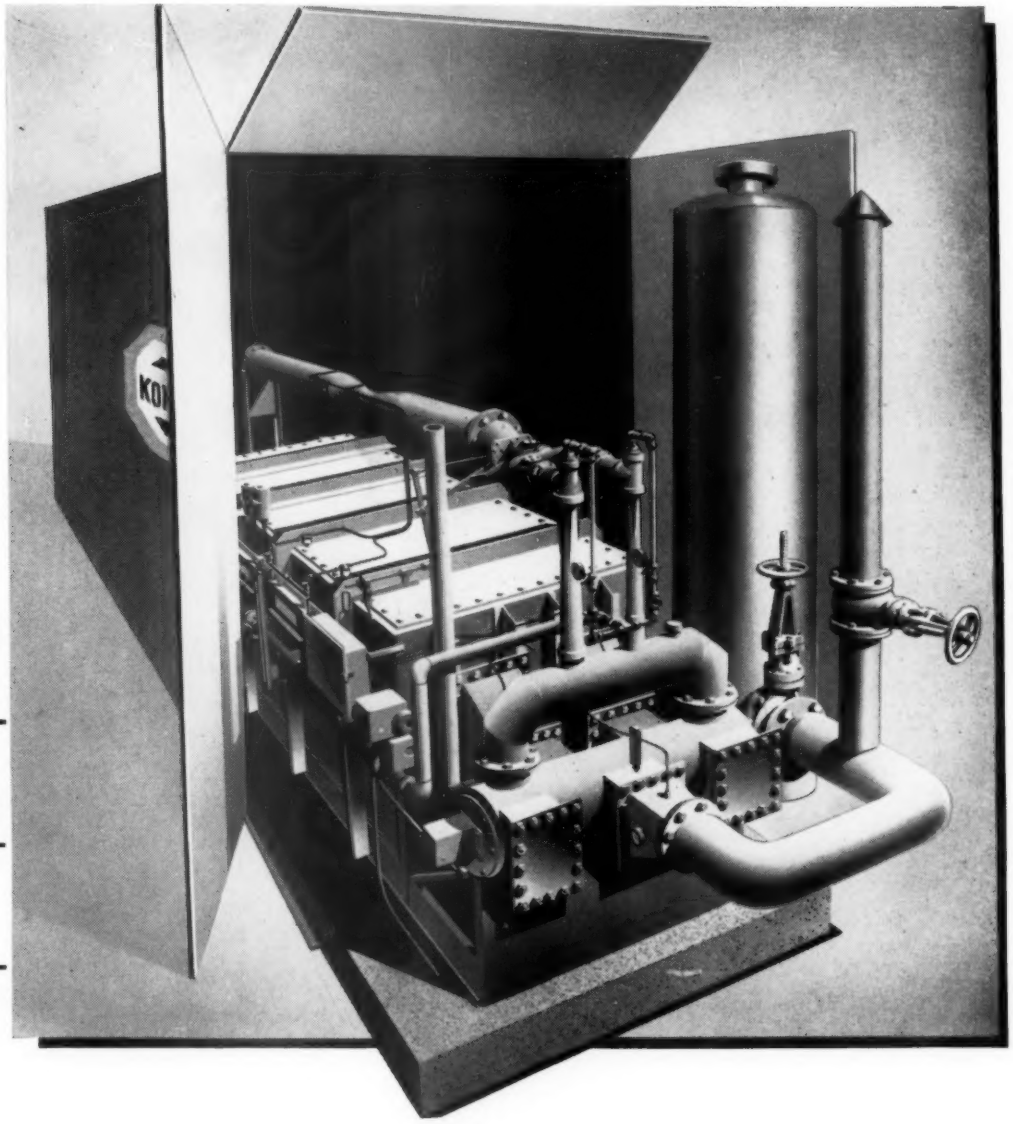

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The Koppers-Hasche Reformer produces low-cost gas that is interchangeable with most natural and manufactured gases. Available in a standardized "package" unit—which means low installation cost—this furnace *meets emergencies.*

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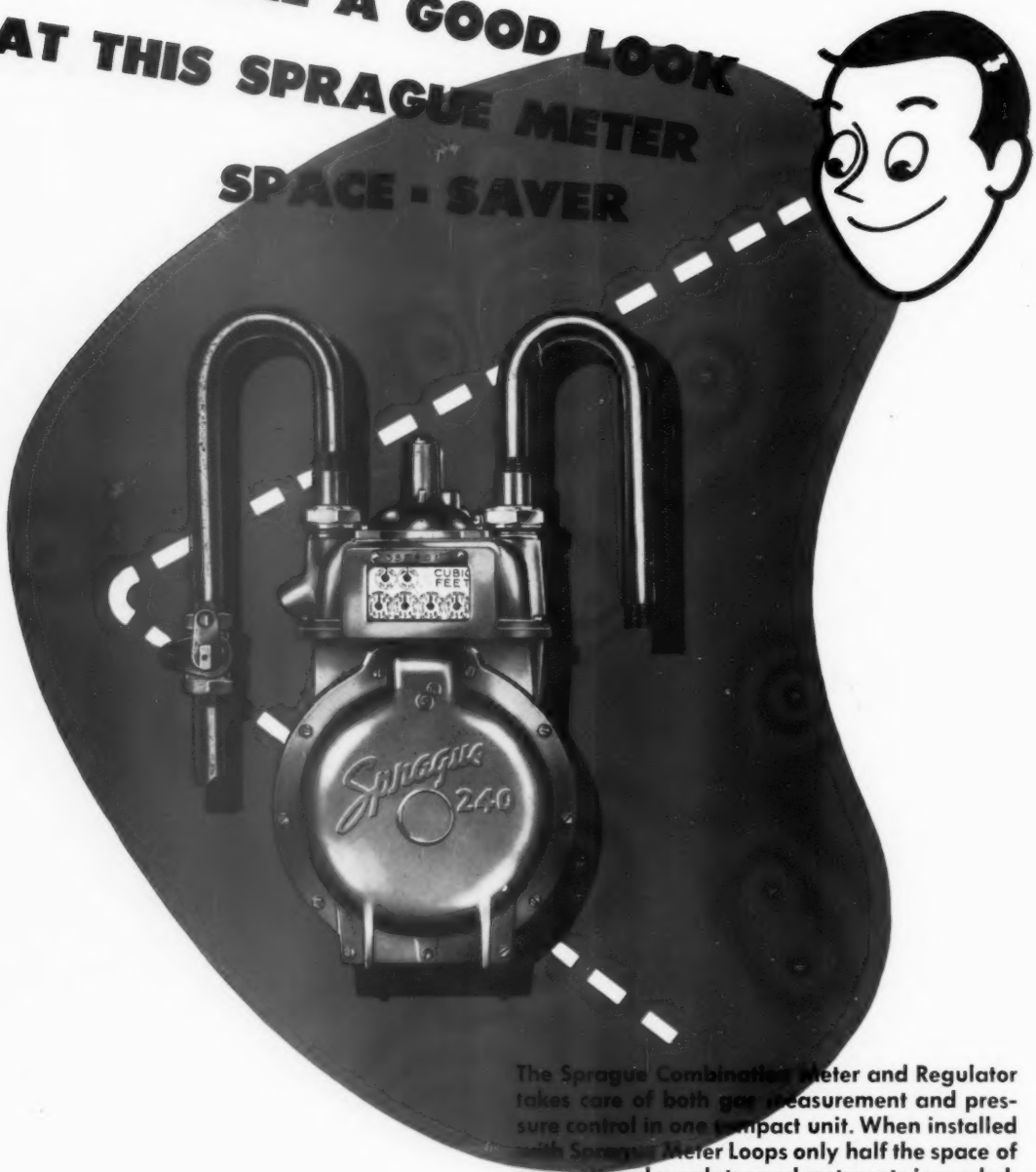

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